



Entergy Nuclear Northeast
Indian Point Energy Center
450 Broadway, GSB
P.O. Box 249
Buchanan, NY 10511-0249
Tel (914) 788-2055

Fred Dacimo
Vice President
License Renewal

NL-09-091

July 1, 2009

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555-0001

SUBJECT: Transmission of Additional Requested Information Regarding Sturgeon
Impingement Data
Indian Point Nuclear Generating Unit Nos. 2 & 3
Docket Nos. 50-247 and 50-286
License Nos. DPR-26 and DPR-64

REFERENCES:

1. NRC Letter dated June 11, 2009, "Summary of Telephone Conference Call Held on May 11, 2009, Between the U.S. Nuclear Regulatory Commission and Entergy Nuclear Operations, Inc., Concerning Endangered Species Act Consultation Data"
2. Entergy Letter dated March 18, 2009, F. R. Dacimo to Document Control Desk, "Comments on NUREG-1437, Draft Supplement 38" (NL-09-036)
3. NRC Letter dated December 5, 2007, "Request for Additional Information Regarding Environmental Review for Indian Point Nuclear Generating Unit Nos. 2 and 3, License Renewal (TAC Nos. MD 5411 and MD 5412)"

Dear Sir or Madam:

Entergy Nuclear Operations, Inc. ("Entergy") seeks to clarify a Nuclear Regulatory Commission ("NRC") Staff telephone conference call summary, dated June 11, 2009 (Reference 1). Additionally, this letter and its attachments provide the additional information requested by the NRC on behalf of the National Marine Fisheries Service ("NMFS") regarding historic sturgeon impingement monitoring (prior to installation of the New York State Department of Environmental Conservation-approved ("NYSDEC") state-of-the-art screen and fish return system).

The June 11 teleconference summary, NRC Staff indicated that the sturgeon impingement abundance data Entergy provided in its comments on NUREG-1437, Supplement 38 (Draft Supplemental Environmental Impact Statement or "DSEIS") (Reference 2), appeared to be inconsistent with previously-reported Entergy data provided in response to a 2007 NRC request for information (Reference 3). During the teleconference, Entergy's consultants, leading experts Larry Barnthouse and Mark Mattson, explained that the two data sets provided by Entergy are

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consistent internally but inconsistent with the calculated impingement summary data set forth in Table 4-11 of the DSEIS due to what appears to be a possible, but understandable, extrapolation error in calculations performed for the DSEIS.

Namely, the numbers reported in DSEIS Table 4-11 seem to have been extrapolated from the impingement data provided by Entergy in response to an NRC request for information during the September 2007 site environmental audit. The inconsistencies appear to result from the fact that the raw data provided included sturgeon impingement counts from both "sample" and "non-sample days." A "sample" day was one in which all fish and blue crabs impinged during the previous 24-hours (including both Atlantic and shortnose sturgeon) were removed from the debris, identified to species, and enumerated. A "non-sample" day was one in which the debris impinged during the previous 24-hours was examined for the presence of blue crabs and both sturgeon species, and these organisms were identified to species and enumerated. Thus, the information provided by Entergy with respect to sturgeon represents total impingement on a year-round basis, not a mere fraction of a year's impingement count.

During the DSEIS extrapolation process, it appears that it was assumed that impinged sturgeon were not recorded on "non-sample" days. As a result, for years in which there were 110 sample days instead of 365, the extrapolation process used a 110- versus 365-day period for purposes of analysis, extrapolating the total up to a 365-day count and thereby overestimating the total number of sturgeon impinged. Understandably, that conclusion appeared inconsistent with the Entergy data, thus leading to the Staff's question for discussion. Entergy believes this difference can be resolved, as annual impingement numbers for Atlantic and shortnose sturgeon, adjusted for collection efficiency, are being provided in the Attachments to this letter.

In this regard, Entergy agreed during the May 11, 2009 teleconference to provide additional, clarifying information regarding sturgeon impingement. Specifically, the NRC Staff requested tables of actual and estimated sturgeon impingements—not only for its own use, but also to support the NMFS assessment of license renewal. Actual impingement data are provided in Tables 1, 2a-2d and 3a-3d, which are attached to this letter. Estimated impingements consist of those determined using actual impingement data counts and adjusting the values using calculated collection efficiency factors, and are set forth in Table 4.

A summary description of the information contained in each Table follows:

1. Number of days sampled for sturgeon impingement in each year 1975-1990:
Table 1 provides a compilation of information describing the level of sampling performed for purposes of impingement monitoring in each year between, and including, 1974 and 1990. Although the request initiates in 1975, since 1974 data are available, they are included as well. The information is drawn from both Statistical Analysis System ("SAS") data files and individual impingement monitoring reports.
2. Data for years in which no sturgeon were reported as being impinged, to determine whether that result was due to not sampling for sturgeon or not finding any: Table 1 also provides data demonstrating that (1) daily impingement sampling occurred in each year 1974 through 1980 whenever a unit was operating and withdrawing circulating water, including years with a zero catch of sturgeon; and (2) more dates were sampled at IP2 and IP3 than were scheduled during the years of 1981-1990 when the stratified sampling plan was implemented. Although only 110 days per year were designated as scheduled "sample days," impinged sturgeon were counted every day that the Units were operating

and withdrawing circulating water, as demonstrated by the documentation of the presence of sturgeon on "non-sample days" in the sources examined.

3. Data on specific dates of sturgeon impingement: Data from individual SAS data file records of shortnose and Atlantic sturgeon collected by impingement at IP2 and IP3 on both "sample" and "non-sample" days in each year, 1974 through 1990, are presented in Tables 2a through 2d.
4. Data on length, weight, condition and disposition of impinged sturgeon: Available data describing the length, weight, condition and disposition of individual shortnose sturgeon and Atlantic sturgeon collected by impingement at IP2 and IP3 on both "sample" and "non-sample" days are presented in Tables 3a through 3d. Note that Entergy did not locate the annual sturgeon logs, so these data are based on information found in the SAS Sturgeon Level 6 data files or in the annual impingement reports.
5. Estimated Impingements: Table 4 presents the raw counts determined from the Level 5 database files, and counts adjusted for collection efficiency for shortnose and Atlantic sturgeon impinged. The collection efficiency adjustment uses an algorithm to expand the annual raw counts upward because not all fish impinged on the traveling screens are counted. Specifically, a collection efficiency coefficient is calculated based on the Unit specific intake water temperature, and the raw count is divided by the coefficient to derive the collection efficiency (CE) adjusted count. The raw counts (Level 5 Counts) presented in Table 4 are comparable to data presented in Appendix Table A-1 of Entergy's Comments on NUREG-1437 (March 18, 2009). The CE Adjusted Level 5 Counts in Table 4 are comparable to the values presented in Table 4-11 of the DSEIS for the years 1975 through 1980.

Entergy appreciates the opportunity to provide this additional information. Should the NRC Staff or NMFS require additional information or have any questions, please contact Dara Gray at (914) 736-8414.

I declare under penalty of perjury that the foregoing is true and correct. Executed on

7/1/09.

Sincerely,



FRD/dmt

Enclosure: 1. Sturgeon Impingement at Indian Point 1974-1990

cc: Mr. Samuel J. Collins, Regional Administrator, NRC Region I
Mr. Sherwin E. Turk, NRC Office of General Counsel, Special Counsel
Mr. John Boska, NRR Senior Project Manager
Mr. Andrew L. Stuyvenberg, NRC Environmental Project Manager
NRC Resident Inspector's Office
Mr. Paul Eddy, New York State Department of Public Service
Mr. Francis J. Murray, President and CEO, NYSERDA

ENCLOSURE 1 TO NL-09-091

Sturgeon Impingement at Indian Point 1974-1990

ENTERGY NUCLEAR OPERATIONS, INC.
INDIAN POINT NUCLEAR GENERATING UNIT NOS. 2 & 3
DOCKET NOS. 50-247 AND 50-286
LICENSE NOS. DPR-26 and DPR-64

Sturgeon Impingement at Indian Point

1974 - 1990

Sturgeon Impingement at Indian Point, 1974 through 1990

<u>Table 1</u>	Documentation of Indian Point Sampling Effort, 1974 - 1990.
<u>Table 2a</u>	Individual Data File Records of Shortnose Sturgeon Collected by Impingement at Indian Point Unit No. 2 in Each Year, 1974 through 1990.
<u>Table 2b</u>	Individual Data File Records of Shortnose Sturgeon Collected by Impingement at Indian Point Unit No. 3 in Each Year, 1974 through 1990.
<u>Table 2c</u>	Individual Data File Records of Atlantic Sturgeon Collected by Impingement at Indian Point Unit No. 2 in Each Year, 1974 through 1990.
<u>Table 2d</u>	Individual Data File Records of Atlantic Sturgeon Collected by Impingement at Indian Point Unit No. 3 in Each Year, 1974 through 1990.
<u>Table 3a</u>	Estimates of the Annual Total Number of Shortnose Sturgeon Collected by Impingement at Indian Point Unit 2, 1974 through 1990.
<u>Table 3b</u>	Estimates of the Annual Total Number of Shortnose Sturgeon Collected by Impingement at Indian Point Unit 3, 1974 through 1990.
<u>Table 3c</u>	Estimates of the Annual Total Number of Atlantic Sturgeon Collected by Impingement at Indian Point Unit 2, 1974 through 1990.
<u>Table 3d</u>	Estimates of the Annual Total Number of Atlantic Sturgeon Collected by Impingement at Indian Point Unit 3, 1974 through 1990.
<u>Table 4</u>	Impingement Data File Level 5 Actual Counts and Level 5 Counts Adjusted for Collection Efficiency for Shortnose and Atlantic Sturgeon Collected in Impingement Samples, Indian Point, 1975 through 1990.

Table 1. Documentation of Indian Point Sampling Effort, 1974 - 1990. (see footnotes at the bottom of this table explaining codes)

		74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
IP2	1-Jan	0	1	1	1	1	1	1										
	2-Jan	0	1	1	1	1	1	1						1	1			
	3-Jan	0	1	1	1	1	1	1		1	1	1	1		1			
	4-Jan	0	1	1	1	1	1	1		1	1		1				1	
	5-Jan	0	1	1	1	1	1	1			1	1					1	
	6-Jan	0	1	1	1	1	1	1		1					1			
	7-Jan	0	1	1	1	1	1	1			1			1	1			
	8-Jan	0	1	1	1	1	1	1										
	9-Jan	0	1	1	1	1	1	1				1		1				1
	10-Jan	0	1	1	1	1	1	1		1				1			1	
	11-Jan	0	1	1	1	1	1	1					1	1	1			1
	12-Jan	0	1	1	1	1	1	1				1	1	1		1		
	13-Jan	0	1	1	1	1	1	1			1		1	1	1	1		
	14-Jan	0	1	1	1	1	1	1		1	1		1	1	1			1
	15-Jan	0	1	1	1	1	1	1					1	1			1	
	16-Jan	0	1	1	1	1	1	1				1	1					1
	17-Jan	0	1	1	1	1	1	1					1					
	18-Jan	0	1	1	1	1	1	1			1	1	1				1	
	19-Jan	0	1	1	1	1	1	1		1			1				1	
	20-Jan	1	1	1	1	1	1	1				1	1				1	
	21-Jan	0	1	1	1	1	1	1			1		1					
	22-Jan	1	1	1	1	1	1	1			1	1	1				1	1
	23-Jan	1	1	1	1	1	0	1		1		1	1			1		1
	24-Jan	1	1	1	1	1	1	1		1	1	1	1					
	25-Jan	1	1	1	1	1	1	1		1		1	1		1			
	26-Jan	1	1	1	1	1	1	1		1	1		1			1		
	27-Jan	1	1	1	1	1	1	1					1				1	
	28-Jan	1	1	1	1	1	1	1					1		1			1
	29-Jan	1	1	1	1	1	1	1					1				1	
	30-Jan	1	1	1	1	1	1	1					1					
	31-Jan	1	1	1	1	1	1	1					1					
	1-Feb	1	1	1	1	1	1	1			1		1				1	
	2-Feb	1	1	1	1	1	1	1					X			1	1	
	3-Feb	1	1	1	0	1	1	1				1	1			1		
	4-Feb	1	1	1	0	1	1	1				1	1				1	1
	5-Feb	1	1	1	1	1	1	1					1					1
	6-Feb	1	1	1	1	1	1	1		1			1					
	7-Feb	1	1	1	1	1	1	1					1					
	8-Feb	1	1	1	1	1	1	1		1		1	1					1
	9-Feb	1	1	1	1	1	1	1	1				1					
	10-Feb	1	1	1	1	1	1	1	1				1					

Table 1. Documentation of Indian Point Sampling Effort, 1974 - 1990. (see footnotes at the bottom of this table explaining codes)

	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
11-Feb	1	1	1	1	1	1	1	1			1	1		1			1
12-Feb	1	1	1	1	1	1	1	1			1	1		1			
13-Feb	1	1	1	1	1	1	1	1			1	1		1			1
14-Feb	1	1	1	1	1	1	1	1				1		1			
15-Feb	1	1	1	1	1	1	1	1	1			1					
16-Feb	1	1	1	1	1	1	1	1				1					
17-Feb	1	1	1	1	1	1	1	1	1			1			1		
18-Feb	1	1	1	1	0	0	1	1				1			1		
19-Feb	1	1	1	1	0	1	1	1	1			1			1		
20-Feb	1	1	1	1	0	1	1	1				1					
21-Feb	1	1	1	1	0	1	1	1				1			1	1	
22-Feb	1	1	1	1	0	1	1	1				1			1	1	
23-Feb	0	1	1	1	0	1	1	1		1		1			1		
24-Feb	0	1	1	1	0	1	1	1	1	1		1					
25-Feb	0	1	1	1	0	1	1	1	1	1		1					
26-Feb	0	1	1	1	0	1	1	1		1		1		1	1		
27-Feb	0	1	1	1	0	1	1	1	1	1	1	1			1	1	
28-Feb	0	1	1	1	0	1	1	1			1	1				1	
29FEB			1				1										
1-Mar	0	1	1	1	0	1	1	1	1			1		1	1	1	
2-Mar	0	1	1	1	0	1	1	1				1		1	1	1	
3-Mar	0	1	1	1	0	1	1	1	1		1	1				1	
4-Mar	0	1	1	1	0	1	1	1				1				1	
5-Mar	0	1	1	1	0	1	1	1				1					
6-Mar	0	1	1	1	0	1	1	1	1			1					
7-Mar	0	1	1	1	0	1	1	1	1		1	1			1	1	
8-Mar	0	1	1	1	0	1	1	1	1			1		1	1	1	
9-Mar	0	1	1	1	0	1	1	1	1		1	1					
10-Mar	0	1	1	1	0	1	1	1		1	1	1				1	
11-Mar	0	1	1	1	0	1	1	1		1	1	1		1	1		
12-Mar	0	1	1	1	0	1	1	1	1	1		1					
13-Mar	1	1	1	1	0	1	1	1		1	1	1		1	1		
14-Mar	1	1	1	1	0	1	1	1		1		1			1		
15-Mar	1	1	1	1	0	1	1	1		1		1					
16-Mar	1	1	1	1	0	1	1	1	1	1	1	1					
17-Mar	1	1	1	1	0	1	1	1		1		1					
18-Mar	1	1	1	1	0	1	1	1				1		1			
19-Mar	1	1	1	1	0	1	1	1			1	1					
20-Mar	1	1	1	1	0	1	1	1				1	1	1		1	
21-Mar	1	1	1	1	0	1	1	1			1	1	1				
22-Mar	1	1	1	1	0	1	1	1	1	1	1	1	1		1		

Table 1. Documentation of Indian Point Sampling Effort, 1974 - 1990. (see footnotes at the bottom of this table explaining codes)

	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
23-Mar	1	1	1	1	0	1	1	1				1	1		1		
24-Mar	1	1	1	0	0	1	1	1		1		1	1				
25-Mar	1	0	1	0	0	1	1	1	1	1	1	1	1	1			
26-Mar	1	1	1	1	0	1	1	1		1		1	1	1			
27-Mar	1	1	1	1	0	1	1	1				1	1				
28-Mar	1	1	1	1	0	1	1	1	1			1	1				
29-Mar	1	1	1	1	0	1	1	1	1	1		1					
30-Mar	1	1	1	1	0	1	1	1				1					
31-Mar	1	1	1	1	0	1	1	1				1	1				
1-Apr	1	1	0	1	0	1	1	1				1					
2-Apr	1	1	0	1	0	1	1	1				1		1			
3-Apr	1	1	0	1	0	1	1	1		1		1					
4-Apr	1	1	0	1	0	1	1	1				1					
5-Apr	1	1	0	1	0	1	1	1		1	1	1					
6-Apr	1	1	0	1	0	1	1	1				1					
7-Apr	1	1	0	1	0	1	1	1				1					
8-Apr	1	1	0	1	0	1	1	1			1	1					
9-Apr	1	1	0	1	0	1	1	1				1					
10-Apr	1	1	0	1	0	1	1	1			1	1					
11-Apr	1	1	0	1		1	1	1				1					
12-Apr	1	1	0	1	0	1	1	1				1					
13-Apr	1	1	0	1	0	1	1	1				1					
14-Apr	1	1	0	0	0	1	1	1				1					
15-Apr	1	1	0	0	0	1	1	1				1					
16-Apr	1	1	0	0	0	1	1	1				1					
17-Apr	1	1	0	0	0	1	1	1				1					
18-Apr	1	1	0	0	0	1	1	1				1					
19-Apr	1	1	0	0	0	1	1	1									
20-Apr	1	1	1	0	0	1	1	1				1					
21-Apr	1	1	1	0	0	1	1	1						1			
22-Apr	1	1	1	0	0	1	1	1									
23-Apr	1	1	0	0	0	1	1	1									
24-Apr	1	1	0	0	0	1	1	1									
25-Apr	1	1	0	0	0	1	1	1						1			
26-Apr	1	1	0	0	0	1	1	1									
27-Apr	1	1	0	0	0	1	1	1	1								
28-Apr	1	1	0	0	0	1	1	1				1		1	1		
29-Apr	1	1	0	0	0	1	1	1									
30-Apr	1	1	0	0	0	1	1	1		1							
1-May	1	1	0	0	0	1	1	1									
2-May	1	1	0	0	0	1	1	1				1					

Table 1. Documentation of Indian Point Sampling Effort, 1974 - 1990. (see footnotes at the bottom of this table explaining codes)

	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
3-May	1	1	0	0	0	1	1	1					1		1		
4-May	1	1	0	0	0	1	1	1									
5-May	1	1	0	0	0	1	1	1				1		1			
6-May	1	1	0	0	0	1	1	1				1			1		
7-May	1	1	0	0	0	1	1	1									
8-May	1	1	0	0	0	1	1	1	1								
9-May	1	1	0	0	0	1	1	1		1							
10-May	1	1	0	0	0	1	1	1				1					
11-May	1	1	0	0	0	1	1	1				1					
12-May	1	1	0	0	0	1	1	1	1			1					
13-May	1	1	0	0	0	1	1	1				1					
14-May	1	1	0	0	0	1	1	1		1		1					1
15-May	1	1	0	1	0	1	1	1		1	1	1					
16-May	1	1	0	1	0	1	1	1							1		
17-May	1	1	0	1	0	1	1	1		1							
18-May	1	1	0	1	0	1	1	1			1						
19-May	1	1	0	1	0	1	1	1	1	1				1			
20-May	1	1	0	1	0	1	1	1				1					
21-May	1	1	0	1	0	1	1	1		1							
22-May	1	1	0	1	0	1	1	1		1				1			
23-May	1	1	0	1	1	1	1	1		1				1	1		
24-May	1	1	0	1	1	1	1	1		1		1			1		
25-May	1	1	0	1	1	1	1	1			1	1					
26-May	1	1	0	1	1	1	1	1		1		1	1		1		
27-May	1	1	0	1	1	1	1	1		1		1					
28-May	1	1	0	1	1	1	1	1		1			1				
29-May	1	1	0	1	1	1	1	1		1				1			
30-May	1	1	0	1	1	1	1	1		1	1	1					
31-May	1	1	0	1	1	1	1	1			1		1				
1-Jun	1	1	0	1	1	1	1	1			1	1		1			
2-Jun	1	1	0	1	1	1	1	1			1	1		1			
3-Jun	1	1	0	1	0	1	1	1		1		1			1		
4-Jun	1	1	0	1	1	1	1	1				1			1		
5-Jun	1	1	0	1	1	1	1	1		1		1					
6-Jun	1	1	0	1	1	1	1	1	1			1	1		1		
7-Jun	1	1	0	1	1	1	1	1				1	1				
8-Jun	1	1	1	1	1	1	1	1	1			1	1		1		
9-Jun	1	1	0	1	1	1	1	1		1			1		1		
10-Jun	1	1	1	1	1	1	1	1		1		1	1		1		
11-Jun	1	1	1	1	1	1	1	1	1	1		1	1	1			
12-Jun	1	1	1	1	1	1	1	1				1	1				

Table 1. Documentation of Indian Point Sampling Effort, 1974 - 1990. (see footnotes at the bottom of this table explaining codes)

	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
13-Jun	1	1	0	1	1	1	1	1				1	1		1		
14-Jun	1	1	1	1	1	1	1	1		1		1	1		1		
15-Jun	1	1	0	1	1	1	1	1		1		1	1	1	1		
16-Jun	1	1	0	1	1	1	1	1					1	1	1		
17-Jun	1	1	0	1	1	1	1	1	1			1	1		1		
18-Jun	1	1	0	1	1	0	1	1				1	1				
19-Jun	1	1	0	1	1	0	1	1		1		1	1		1		
20-Jun	1	1	0	1	1	0	1	1	1	1		1	1	1	1		
21-Jun	1	1	0	1	1	0	1	1		1		1	1		1		
22-Jun	1	1	0	1	1	0	1	1				1	1		1		
23-Jun	1	1	0	1	1	0	1	1				1	1		1		1
24-Jun	1	1	0	1	1	0	1	1				1	1	1			
25-Jun	1	1	0	1	1	0	1	1				1	1	1			
26-Jun	1	1	0	1	1	0	1	1					1		1		1
27-Jun	1	1	0	1	1	0	1	1		1			1		1		1
28-Jun	1	1	0	1	1	0	1	1		1		1	1		1		
29-Jun	1	1	0	1	1	0	1	1				1	1		1		1
30-Jun	1	1	0	1	1	0	1	1	1			1	1		1		1
1-Jul	1	1	0	1	1	0	1	1		1		1	1		1		
2-Jul	1	1	0	1	1	0	1					1	1				1
3-Jul	1	1	0	1	1	0	1		1			1	1		1		
4-Jul	1	1	0	0	1	0	1	1		1			1		1	1	
5-Jul	1	1	0	0	1	0	1			1		1	1		1	1	
6-Jul	1	1	0	0	1	0	1	1		1			1		1	1	
7-Jul	1	1	0	0	1	0	1					1	1		1	1	
8-Jul	1	1	0	0	1	0	1					1	1	1	1	1	
9-Jul	1	1	0	0	1	0	1			1		1	1		1	1	
10-Jul	1	1	0	0	1	0	1						1		1	1	1
11-Jul	1	1	0	0	1	0	1		1	1		1	1		1	1	1
12-Jul	1	1	0	0	1	0	1	1		1			1		1	1	1
13-Jul	1	1	0	0	1	0	1			1		1	1		1	1	1
14-Jul	1	1	0	0	1	0	1		1			1	1		1	1	1
15-Jul	1	1	0	0	1	0	1			1		1	1		1	1	1
16-Jul	1	1	0	0	1	0	1			1		1	1			1	1
17-Jul	1	1	0	0	1	0	1					1	1			1	1
18-Jul	1	1	0	0	1	0	1			1		1	1		1	1	1
19-Jul	1	1	0	0	1	0	1			1		1	1	1	1	1	1
20-Jul	1	1	0	0	1	0	1	1		1		1	1	1	1	1	
21-Jul	1	1	0	0	1	0	1	1		1		1	1		1	1	1
22-Jul	1	1	0	0	1	0	1	1		1		1	1	1	1	1	1
23-Jul	1	1	0	0	1	0	1	1	1	1		1	1	1	1	1	

Table 1. Documentation of Indian Point Sampling Effort, 1974 - 1990. (see footnotes at the bottom of this table explaining codes)

	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
24-Jul	1	1	0	0	1	0	1	1		1		1	1	1		1	1
25-Jul	1	1	0	0	1	0	1		1	1		1	1	1	1	1	1
26-Jul	1	1	0	0	1	0	1			1		1	1	1	1	1	1
27-Jul	1	1	0	0	1	0	1	1		1		1	1	1	1	1	1
28-Jul	1	1	0	0	1	0	1			1		1	1	1	1	1	1
29-Jul	1	1	0	0	1	0	1			1		1	1		1	1	1
30-Jul	1	1	0	0	1	0	1	1		1		1	1	1	1	1	1
31-Jul	1	1	0	0	1		1		1			1	1	1		1	1
1-Aug	1	1	0	0	1	0	1			1		1	1			1	1
2-Aug	1	1	0	0	1	0	1			1			1		1	1	1
3-Aug	1	1	0	0	1	0	1			1		1	1	1	1	1	1
4-Aug	1	1	0	0	1	0	1	1		1		1	1	1	1	1	1
5-Aug	1	1	0	0	1	0	1	1		1		1	1	1	1	1	1
6-Aug	1	1	0	1	1	0	1			1		1	1	1		1	1
7-Aug	1	1	0	1	1	0	1	1		1		1	1	1		1	1
8-Aug	1	1	0	1	1	0	1			1		1	1			1	1
9-Aug	1	1	0	1	1	0	1			1		1	1		1	1	1
10-Aug	1	1	0	1	1	0	1			1		1	1	1	1	1	1
11-Aug	1	1	0	1	1	0	1			1		1	1	1	1	1	1
12-Aug	1	1	0	1	1	0	1			1		1	1	1	1	1	1
13-Aug	1	1	0	1	1	0	1	1		1		1	1	1	1	1	1
14-Aug	1	1	0	1	1	0	1			1		1	1	1	1	1	1
15-Aug	1	1	0	1	1	0	1	1		1		1	1		1	1	1
16-Aug	1	1	0	1	1	0	1			1		1	1	1	1	1	1
17-Aug	1	1	0	1	1	0	1			1		1	1	1	1	1	1
18-Aug	1	1	0	1	1	0	1		1	1		1	1		1	1	1
19-Aug	1	1	0	1	1	0	1	1		1		1	1	1	1	1	1
20-Aug	1	1	0	1	1	0	1		1	1			1	1	1	1	1
21-Aug	1	1	0	1	1	0	1			1		1	1	1	1	1	1
22-Aug	1	1	0	1	1	0	1	1		1		1	1		1	1	1
23-Aug	1	1	0	1	1	0	1			1		1	1	1		1	1
24-Aug	1	1	0	1	1	0	1	1		1		1	1	1	1	1	1
25-Aug	1	1	0	1	1	0	1	1		1		1	1	1	1	1	1
26-Aug	1	1	0	1	1	0	1			1		1	1	1		1	1
27-Aug	1	1	0	1	1	0	1	1		1		1	1	1		1	1
28-Aug	1	1	0	1	1	0	1			1		1	1	1		1	1
29-Aug	1	1	0	1	1	0	1	1		1		1	1	1	1	1	1
30-Aug	1	1	0	1	1	0	1			1		1	1		1	1	1
31-Aug	1	1	0	1	1		1	1		1		1	1	1	1	1	1
1-Sep	1	1	0	1	1	0	1			1			1	1	1	1	1
2-Sep	1	1	0	1	1	0	1			1		1	1	1	1	1	1

Table 1. Documentation of Indian Point Sampling Effort, 1974 - 1990. (see footnotes at the bottom of this table explaining codes)

	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
3-Sep	1	1	0	1	1	0	1			1		1	1			1	1
4-Sep	1	1	0	1	1	0	1	1				1	1	1	1	1	1
5-Sep	1	1	0	1	1	0	1	1		1		1	1		1	1	1
6-Sep	1	1	0	1	1	0	1			1		1	1			1	1
7-Sep	1	1	0	1	1	0	1			1		1	1	1		1	1
8-Sep	1	1	0	1	1	0	1			1		1	1	1	1	1	1
9-Sep	1	1	0	1	1	0	1			1		1	1	1		1	1
10-Sep	1	1	0	1	1	0	1			1		1	1	1		1	1
11-Sep	1	1	0	1	1	0	1		1	1		1	1	1	1	1	1
12-Sep	1	1	0	1	1	1	1			1		1	1		1	1	1
13-Sep	1	1	0	1	1	1	1			1		1	1	1	1	1	1
14-Sep	1	1	0	1	1		1			1		1	1	1	1	1	1
15-Sep	1	1	0	1	1	1	1			1		1	1		1	1	1
16-Sep	1	1	0	1	1	1	1	1		1		1	1	1	1	1	1
17-Sep	1	1	1	1	1	1	1					1	1	1		1	1
18-Sep	1	1	0	1	1	1	1			1		1	1		1	1	1
19-Sep	1	1	0	1	1	1	1			1		1	1	1	1	1	1
20-Sep	1	1	1	1	1	1	1			1		1	1		1	1	1
21-Sep	1	1	1	1	1	1	1		1	1		0	1	1	1	1	1
22-Sep	1	1	1	1	1	1	1			1		0	1	1		1	1
23-Sep	1	1	1	1	1	1	1		1	1		1	1	1	1		1
24-Sep	1	1	1	1	1	1	1			1		1	1	1	1	1	1
25-Sep	1	1	1	1	1	1	1			1		1	1	1	1	1	1
26-Sep	1	1	1	1	1	1	1			1		1	1	1	1	1	1
27-Sep	1	1	1	1	1	1	1			1		1	1	1	1	1	1
28-Sep	1	1	1	1	1	1	1			1		1	1	1		1	1
29-Sep	1	1	1	1	1	1	1			1		1	1	1		1	1
30-Sep	1	1	1	1	1	1	1			1		1	1	1	1	1	1
1-Oct	1	1	1	1	1	1	1	1	1	1		1	1	1	1	1	
2-Oct	1	1	1	1	1	1	1		1	1		1	1	1		1	1
3-Oct	1	1	1	1	1	1	1			1		1	1	1		1	
4-Oct	1	1	1	1	1	1	1		1	1		1	1	1	1	1	
5-Oct	1	1	1	1	1	1	1	1	1	1		1	1	1	1	1	
6-Oct	1	1	1	1	1	1	1	1				1	1	1	1	1	
7-Oct	1	1	1	1	1	1	1	1				1	1	1	1	1	
8-Oct	1	1	1	1	1	1	1		1			1	1	1		1	
9-Oct	1	1	1	1	1	1	1	1				1		1		1	1
10-Oct	1	1	1	1	1	1	1	1				1	1	1	1	1	
11-Oct	1	1	1	1	1	1	1	1			1	1	1		1	1	
12-Oct	1	1	1	1	1	1	1	1			1	1	1	1	1	1	
13-Oct	1	1	1	1	1	1	1	1	1		1	1	1	1	1	1	

Table 1. Documentation of Indian Point Sampling Effort, 1974 - 1990. (see footnotes at the bottom of this table explaining codes)

	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
14-Oct	1	1	1	1	1	1	1		1		1	1	1	1	1	1	
15-Oct	1	1	1	1	1	1	1		1		1	1	1	1	1	1	
16-Oct	1	1	1	1	1	1	1		1		1	1	1	1	1	1	1
17-Oct	1	1	1	1	1	1	1				1	1	1	1	1	1	
18-Oct	1	1	1	1	1	1	1		1		1	1	1	1	1	1	
19-Oct	1	1	1	1	1	1	1	1			1	1	1		1	1	
20-Oct	1	1	1	1	1	1	1	1			1	1	1	1	1	1	
21-Oct	1	1	1	1	1	1	1	1			1	1	1	1	1	1	
22-Oct	1	1	1	1	1	1	1	1			1	1	1	1	1	1	
23-Oct	1	1	1	1	1	1	1	1	1		1	1	1	1	1	1	1
24-Oct	1	1	1	1	1	1	1	1			1	1	1		1	1	
25-Oct	1	1	1	1	1	1	1	1			1	1	1	1	1	1	
26-Oct	1	1	1	1	1	1	1	1				1	1	1	1	1	
27-Oct	1	1	1	1	1	1	1	1			1	1	1	1	1	1	
28-Oct	1	1	1	1	1	1	1		1		1	1	1	1	1	1	
29-Oct	1	1	1	1	1	1	1	1		1	1	1	1	1	1	1	
30-Oct	1	1	1	1	1	1	1	1			1	1	1	1	1	1	1
31-Oct	1	1	1	1	1	1	1	1		1	1	1	1	1	1	1	
1-Nov	1	1	1	1	1	1	1			1	1	1	1	1	1	1	
2-Nov	1	1	1	1	1	1	1			1		1		1	1	1	
3-Nov	1	1	1	1	1	1	1	1		1		1	1	1		1	
4-Nov	1	1	1	1	1	1	1	1		1	1	1	1	1		1	
5-Nov	1	1	1	1	1	1	1	1		1		1	1	1	1	1	
6-Nov	1	1	1	1	1	1	1			1		1	1		1	1	1
7-Nov	1	1	1	1	1	1	1	1		1	1	1		1		1	
8-Nov	1	1	1	1	1	1	1			1	1	1	1	1	1	1	
9-Nov	1	1	1	1	1	1	1	1		1	1	1	1	1	1	1	
10-Nov	1	1	0	1	1	1	1	1		1		1	1	1	1	1	
11-Nov	1	1	0	1	1	1	1	1		1	1	1	1		1	1	
12-Nov	1	1	0	1	1	1	1			1	1	1			1	1	
13-Nov	1	1	0	1	1	1	1	1		1	1	1	1		1	1	1
14-Nov	1	1	0	1	1	1	1	1		1		1	1	1	1	1	
15-Nov	1	1	0	1	1	1	1	1		1	1	1	1		1	1	
16-Nov	1	1	0	1	1	1	1	1		1		1	1		1	1	
17-Nov	1	1	0	1	1	1	1			1		1	1		1	1	
18-Nov	1	1	0	1	1	1	1			1	1	1	1	1		1	
19-Nov	1	1	0	1	1	1	1			1	1	1	1	1	1	1	
20-Nov	1	1	0	1	1	1	1	1		1	1	1	1	1	1	1	
21-Nov	1	1	0	1	1	1	1			1	1	1	1			1	1
22-Nov	1	1	0	1	1	1		1		1		1	1		1	1	
23-Nov	1	1	0	1	1	1		1		1	1	1	1		1	1	

Table 1. Documentation of Indian Point Sampling Effort, 1974 - 1990. (see footnotes at the bottom of this table explaining codes)

	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
24-Nov	1	1	0	1	1	1				1		1			1	1	
25-Nov	1	1	0	1	1	1		1		1	1	1		1	1	1	
26-Nov	1	1	0	1	1	1		1		1		1	1	1	1	1	
27-Nov	1	1	0	1	1	1		1		1	1	1	1	1	1	1	1
28-Nov	1	1	0	1	1	1				1	1	1	1		1	1	
29-Nov	1	1	0	1	1	1		1		1	1	1	1		1	1	
30-Nov	1	1	0	1	1	1		1		1	1	1	1			1	
1-Dec	1	1	0	1	1	1		1		1	1	1	1		1	1	
2-Dec	1	1	0	1	1	1		1		1	1	1	1		1		
3-Dec	1	1	0	1	1	1		1		1	1	1	1	1	1		
4-Dec	1	1	0	1	1	1		1		1	1	1	1	1	1		1
5-Dec	1	1	0	1	1	0		1		1		1	1		1	1	
6-Dec	1	1	0	1	1	1		1		1	1	1			1	1	
7-Dec	1	1	0	1	1	1		1		1	1	1	1			1	
8-Dec	1	1	0	1	1	1		1				1	1		1	1	
9-Dec	1	1	0	1	1	1		1		1		1	1	1	1	1	
10-Dec	1	1	0	1	1	1		1				1	1	1	1	1	
11-Dec	1	1	1	1	1	1		1				1	1	1	1	1	
12-Dec	1	1	0	1	1	1					1	1	1	1	1	1	
13-Dec	1	1	1	1	1	1				1	1	1	1		1	1	
14-Dec	1	1	1	1	1	1		1		1	1	1			1	1	1
15-Dec	1	1	1	1	1	1		1		1	1	1	1			1	
16-Dec	1	1	1	1	1	1		1		1		1	1	1		1	
17-Dec	1	1	1	1	1	1		1		1	1	1	1	1	1	1	
18-Dec	1	1	1	1	1	1				1		1	1	1	1	1	1
19-Dec	1	1	1	1	1	1		1		1	1	1	1		1	1	
20-Dec	1	1	1	1	1	1				1	1	1				1	
21-Dec	1	1	1	1	1	1		1		1		1	1		1	1	
22-Dec	1	1	1	1	1	1		1		1		1	1		1	1	
23-Dec	1	1	1	1	1	1				1		1	1		1	1	
24-Dec	1	1	1	1	1	1		1		1		1	1			1	
25-Dec	1	1	1	1	1	1		1		1		1					
26-Dec	1	1	1	1	1	1				1		1	1			1	1
27-Dec	1	1	1	1	1	1		1		1	1	1	1			1	
28-Dec	1	1	1	1	1	1		1		1	1	1	1			1	
29-Dec	1	1	1	1	1	1				1	1	1	1			1	1
30-Dec	1	1	1	1	1	1		1		1	1	1	1			1	
31-Dec	1	1	1	1	1	1				1		1				1	
Total IP2	365	365	366	365	364	362	326	231	63	205	96	319	221	151	191	201	114
IP3																	
1-Jan	0	1	0	1	1	0		1						1			
2-Jan	0	1	0	1	1	1		1					1	1		1	

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	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
3-Jan	0	1	0	1	1	1		1	1					1			
4-Jan	0	1	0	1	1	1		1	1			1	1				
5-Jan	0	1	0	1	1	1		1								1	
6-Jan	0	1	0	1	1	1		1	1					1			
7-Jan	0	1	0	1	1	1		1						1	1		
8-Jan	0	1	0	1	1	1		1									1
9-Jan	0	1	0	1	1	1		1					1		1		1
10-Jan	0	1	0	1	1	1		1	1				1		1	1	1
11-Jan	0	1	0	1	1	1		1						1			
12-Jan	0	1	0	1	1	1		1	1						1		
13-Jan	0	1	0	1	1	1		1							1		1
14-Jan	0	1	0	1	1	1		1	1			1	1	1	1	1	1
15-Jan	0	1	0	1	1	1		1				1	1	1		1	
16-Jan	0	1	0	1	1	1		1					1				
17-Jan	0	1	0	1	1	1		1								1	
18-Jan	0	1	0	1	1	1		1							1	1	1
19-Jan	0	1	0	1	1	1		1							1	1	
20-Jan	0	1	0	1	1	1		1								1	1
21-Jan	0	1	0	1	1	1		1						1	1	1	
22-Jan	0	1	0	1	1	1		1				1	1	1		1	1
23-Jan	0	1	0	1	1	1		1	1					1	1		
24-Jan	0	1	0	1	1	1		1	1					1	1		1
25-Jan	0	1	0	1	1	1		1					1	1	1		
26-Jan	0	1	0	1	1	1		1	1					1			
27-Jan	0	1	0	1	1	1		1							1	1	1
28-Jan	0	1	0	1	1	1		1			1		1		1	1	1
29-Jan	0	1	0	1	1	1		1					1			1	
30-Jan	0	1	0	1	1	1		1					1				
31-Jan	0	1	0	1	1	1		1			1						1
1-Feb	0	1	0	1	1	1		1				1	1		1	1	
2-Feb	0	1	0	1	1	1		1					1			1	1
3-Feb	0	1	0	1	1	1		1				1		1			
4-Feb	0	1	0	1	1	1	1	1						1	1	1	
5-Feb	0	1	0	1	1	1	1	1						1			1
6-Feb	0	1	0	1	1	1		1	1				1		1	1	1
7-Feb	0	1	0	1	1	1		1	1			1	1			1	1
8-Feb	0	1	0	1	1	1		1	1							1	
9-Feb	0	1	0	1	1	1	1					1	1		1	1	
10-Feb	0	1	0	1	1	1	1									1	1
11-Feb	0	1	0	1	1	1	1	1									
12-Feb	0	1	0	1	1	1	1	1					1	1			1

Table 1. Documentation of Indian Point Sampling Effort, 1974 - 1990. (see footnotes at the bottom of this table explaining codes)

	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
13-Feb	0	1	1	1	1	1	1	1			1	1		1			
14-Feb	0	1	1	1	1	1		1			1		1		1		
15-Feb	0	1	1	1	1	1	1	1	1		1	1					
16-Feb	0	1	1	1	1	1	1	1				1	1				1
17-Feb	0	1	0	1	1	1	1	1	1			1	1				
18-Feb	0	1	0	1	1	1	1	1				1					
19-Feb	0	1	0	1	1	1	1	1	1			1			1		
20-Feb	0	1	0	1	1	1		1						1			
21-Feb	0	1	0	1	1	1	1	1			1	1		1	1		
22-Feb	0	1	1	1	1	1	1	1							1		
23-Feb	0	1	0	1	1	1	1	1			1				1		1
24-Feb	0	1	0	1	1	1	1	1	1								
25-Feb	0	1	0	1	1	1	1	1	1		1	1					
26-Feb	0	1	0	1	1	1	1	1				1		1			1
27-Feb	0	1	0	1	1	1	1	1			1	1			1		
28-Feb	0	1	0	1	1	1	1	1			1	1					1
29FEB			0				1										
1-Mar	0	1	0	1	1	1	1	1				1		1	1		1
2-Mar	0	1	0	1	1	1	1	1				1		1			
3-Mar	0	1	0	1	1	1	1	1			1		1				
4-Mar	0	1	0	1	1	1	1										
5-Mar	0	1	0	1	1	1	1	1	1		1	1	1				1
6-Mar	0	1	0	1	1	1	1	1					1				1
7-Mar	0	1	0	1	1	1	1	1	1		1						
8-Mar	0	1	0	1	1	1	1		1				1	1			
9-Mar	0	1	0	1	1	1	1		1		1	1			1		
10-Mar	0	1	0	1	1	1	1					1	1		1		1
11-Mar	0	1	0	1	1	1	1						1	1	1		
12-Mar	0	1	0	1	1	1	1	1						1	1		
13-Mar	0	1	0	1	1	1	1	1	1		1			1			
14-Mar	0	1	0	1	1	1	1	1			1	1					
15-Mar	0	1	0	1	1	1	1	1			1	1	1		1		
16-Mar	0	1	0	1	1	1	1	1	1		1			1	1		
17-Mar	0	1	0	1	1	1	1	1			1		1				
18-Mar	1	1	0	1	1	1	1	1			1				1		
19-Mar	0	1	0	1	1	1	1	1			1		1				
20-Mar	0	1	0	1	1	1	1	1			1	1	1	1			
21-Mar	0	1	0	1	1	1	1	1			1	1			1		
22-Mar	0	1	0	1	1	1	1	1	1		1		1				
23-Mar	0	1	0	1	1	1	1	1				1	1	1			
24-Mar	0	1	0	1	1	1	1	1			1			1			

Table 1. Documentation of Indian Point Sampling Effort, 1974 - 1990. (see footnotes at the bottom of this table explaining codes)

	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
25-Mar	0	1	0	1	1	1	1	1	1		1	1	1	1	1		
26-Mar	0	1	0	1	1	1	1	1									
27-Mar	0	1	0	1	1	1	1	1				1	1				1
28-Mar	0	1	0	1	1	1		1	1			1		1	1		1
29-Mar	0	1	0	1	1	1	1	1	1			1					1
30-Mar	0	1	0	1	1	1	1	1			1	1	1	1			
31-Mar	0	1	0	1	1	1	1	1				1					
1-Apr	0	1	0	1	1	1	1	1	1			1					
2-Apr	0	1	0	1	1	1	1	1					1	1			
3-Apr	0	1	0	1	1	1	1	1				1		1			1
4-Apr	0	1	0	1	1	1	1	1						1			
5-Apr	0	1	0	1	1	1	1	1			1		1				
6-Apr	0	1	0	1	1	1	1	1						1			
7-Apr	0	1	0	1	1	1	1	1				1		1			
8-Apr	0	1	0	0	1	1	1	1			1		1	1			
9-Apr	0	1	0	0	1	1	1	1						1			
10-Apr	0	1	0	0	1	1	1	1			1						1
11-Apr	0	1	0	1	1	1	1	1					1	1			1
12-Apr	0	1	0	1	1	1	1	1						1			
13-Apr	0	1	0	1	1	1	1	1						1			
14-Apr	0	1	0	1	1	1	1	1									1
15-Apr	0	1	0	1	1	1	1	1						1			
16-Apr	0	1	0	1	1	1	1	1					1				
17-Apr	1	1	0	0	1	1	1	1					1	1			1
18-Apr	1	1	0	1	1	1	1	1			1						1
19-Apr	1	1	1	1	1	1	1	1						1			1
20-Apr	1	1	1	1	1	1	1	1					1				1
21-Apr	1	1	0	1	1	1	1	1									1
22-Apr	1	1	0	1	1	1	1	1					1				1
23-Apr	1	1	0	1	1	1	1	1						1			
24-Apr	0	1	1	1	1	1	1	1									1
25-Apr	0	1	1	0	1	1	1	1					1	1			1
26-Apr	0	1	1	1	1	1	1	1									1
27-Apr	0	1	1	1	1	1	1	1						1			
28-Apr	0	1	1	1	1	1	1	1				1		1	1		
29-Apr	0	1	1	1	1	1	1	1			1		1	1	1		
30-Apr	0	1	1	1	1	1	1	1									
1-May	1	1	1	1	1	1	1	1				1		1			
2-May	1	1	1	1	1	1	1	1				1		1	1		
3-May	1	1	1	1	1	1	1	1				1	1		1		
4-May	0	1	1	1	1	1	1	1									

Table 1. Documentation of Indian Point Sampling Effort, 1974 - 1990. (see footnotes at the bottom of this table explaining codes)

	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
5-May	0	1	1	1	1	1	1	1							1		1
6-May	0	1	1	1	1	1	1	1				1			1		
7-May	0	1	1	1	1	1	1	1				1			1		1
8-May	0	1	1	1	1	1	1	1			1	1					
9-May	0	1	1	1	1	1	1	1				1			1		
10-May	0	1	1	1	1	1	1	1			X	1					1
11-May	0	1	1	1	1	1	1	1				1					
12-May	0	1	1	1	1	1	1	1				1			1		
13-May	0	1	1	1	1	1	1	1				1					
14-May	0	1	1	1	1	1	1	1				1					
15-May	0	1	1	1	1	1	1	1			1	1					
16-May	0	1	1	1	0	1	1	1				1					
17-May	0	1	1	1	1	1	1	1				1					
18-May	0	1	1	1	1	1	1	1			1	1					
19-May	0	1	1	1	1	1	1	1			1	1					
20-May	0	1	1	1	1	1	1	1				1					
21-May	0	1	1	1	1	1	1	1			1	1					
22-May	0	1	1	1	1	1	1	1				1					
23-May	0	1	1	1	1	1	1	1				1					
24-May	0	1	1	1	1	1	1	1				1	1				
25-May	0	1	1	1	1	1	1	1				1					1
26-May	0	1	1	1	1	1	1	1				1					
27-May	0	1	1	1	1	1	1	1			1	1					1
28-May	0	1	1	1	1	1	1	1				1					
29-May	0	1	1	1	1	1	1	1									
30-May	0	1	1	1	1	1	1	1				1					
31-May	0	1	1	1	1	1	1	1				1	1		1		
1-Jun	0	1	1	1	1	1	1	1		1		1	1		1		
2-Jun	0	1	1	0	1	1	1	1		1		1	1		1		
3-Jun	0	1	0	1	1	1	1	1			1	1			1		
4-Jun	0	1	1	1	1	1	1	1			1	1			1		
5-Jun	1	1	1	1	1	1	1	1		1		1			1		
6-Jun	1	1	1	1	1	1	1	1				1	1		1		
7-Jun	1	1	1	1	1	1	1	1				1			1		
8-Jun	1	1	1	1	1	1	1	1							1		
9-Jun	1	1	1	1	1	1	1	1		1	1		1				
10-Jun	1	1	1	1	1	1	1	1			1		1		1		
11-Jun	1	1	1	1	1	1	1	1		1			1				
12-Jun	1	1	1	1	1	1	1	1		1			1		1		
13-Jun	0	1	1	1	1	1	1	1		1			1		1		
14-Jun	0	1	1	1	1	1	1	1		1			1				

Table 1. Documentation of Indian Point Sampling Effort, 1974 - 1990. (see footnotes at the bottom of this table explaining codes)

	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
15-Jun	0	1	1	1	1	1	1	1		1							
16-Jun	0	1	1	1	1	1	1	1		1			1		1		
17-Jun	0	1	1	1	1	1	1	1		1	1		1		1		
18-Jun	0	1	1	1	1	1	1	1		1			1				
19-Jun	1	1	1	1	1	1	1	1		1			1		1		
20-Jun	1	1	1	1	1	1	1	1		1			1		1		
21-Jun	1	1	1	1	1	1	1	1		1	1		1		1		
22-Jun	1	1	1	1	1	1	1	1		1			1		1		
23-Jun	1	1	1	1	1	1	1	1		1			1		1		
24-Jun	1	1	1	1	1	1	1	1		1			1		1		
25-Jun	1	1	1	1	1	1	1	1		1			1		1		
26-Jun	0	1	1	1	0	1	1	1		1					1		1
27-Jun	0	1	1	1	0	1	1	1		1			1		1		X
28-Jun	0	1	1	1	0	1	1	1		1			1		1		1
29-Jun	0	1	1	1	0	1	1	1		1	1				1		
30-Jun	0	1	1	1	0	1	1	1					1		1		
1-Jul	0	1	1	1	0	0	1	1							1		
2-Jul	0	1	1	1	0	1	1				1				1	1	
3-Jul	0	1	1	1	0	1	1			1			1		1		
4-Jul	0	1	1	1	0	1	1	1		1			1		1	1	
5-Jul	0	1	1	1	0	1	1			1			1		1	1	1
6-Jul	0	1	1	1	0	1	1	1		1	1				1	1	
7-Jul	0	1	1	1	0	1	1						1		1	1	
8-Jul	0	1	1	1	0	1	1			1	1		1		1	1	
9-Jul	0	1	1	1	0	1	1			1	1				1	1	1
10-Jul	0	1	1	1	0	1	1			1			1			1	1
11-Jul	0	1	1	1	0	1	1			1	1		1		1	1	1
12-Jul	0	1	1	1	0	1	1	1					1		1	1	1
13-Jul	0	1	1	1	0	1	1						1		1	1	1
14-Jul	0	1	1	0	0	1	1						1		1	1	1
15-Jul	0	1	1	1	0	1	1				1		1		1	1	
16-Jul	0	1	1	1	0	1	1				1		1			1	1
17-Jul	0	1	1	1	0	1	1								1	1	1
18-Jul	1	1	1	1	0	1	1						1		1	1	1
19-Jul	1	1	1	1	0	1	1						1		1	1	1
20-Jul	1	1	1	1	0	1	1	1					1		1	1	1
21-Jul	1	1	1	1	0	1	1	1					1		1	1	1
22-Jul	1	1	1	1	0	1	1	1			1		1		1	1	1
23-Jul	1	1	1	1	0	1	1	1					1		1	1	1
24-Jul	0	1	1	1	0	1	1	1					1		1	1	1
25-Jul	0	1	1	1	0	1	1								1	1	1

Table 1. Documentation of Indian Point Sampling Effort, 1974 - 1990. (see footnotes at the bottom of this table explaining codes)

	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
26-Jul	0	1	1	1	0	1	1				1		1		1	1	1
27-Jul	0	1	1	1	0	1	1	1			1		1		1	1	1
28-Jul	0	1	1	1	0	1	1				1		1		1	1	1
29-Jul	0	1	1	1	0	1	1						1		1	1	1
30-Jul	0	1	1	1	0	1	1	1			1		1		1	1	1
31-Jul	0	1	1	1	0	1	1				1					1	1
1-Aug	0	1	1	1	0	1	1						1			1	1
2-Aug	0	1	1	1	0	1	1						1		1	1	1
3-Aug	0	1	1	1	0	1	1				1				1	1	1
4-Aug	0	1	1	1	0	1	1	1			1		1		1	1	1
5-Aug	0	1	1	1	0	1	1	1			1				1	1	1
6-Aug	0	1	1	1	0	1	1				1		1			1	1
7-Aug	1	1	1	1	0	1	1	1								1	1
8-Aug	1	1	1	1	0	1	1				1		1			1	1
9-Aug	1	1	1	1	0	1	1				1		1		1	1	1
10-Aug	1	1	1	1	0	1	1				1		1		1	1	1
11-Aug	1	1	1	1	0	1	1						1		1	1	1
12-Aug	1	1	1	1	0	1	1								1	1	1
13-Aug	1	1	1	1	0	1	1	1					1		1	1	1
14-Aug	0	1	1	1	0	1	1				1				1	1	1
15-Aug	0	1	1	1	0	1	1	1					1			1	1
16-Aug	0	1	1	1	1	1	1				1		1		1	1	1
17-Aug	0	1	1	1	1	1	1				1		1		1	1	1
18-Aug	0	1	1	1	1	1	1				1		1		1	1	1
19-Aug	0	1	1	1	1	1	1	1			1				1	1	1
20-Aug	0	1	1	1	1	1	1				1		1	1		1	1
21-Aug	0	1	1	1	1	1	1				1		1	1	1	1	1
22-Aug	0	1	0	1	1	1	1	1			1			1	1	1	1
23-Aug	0	1	1	1	1	1	1				1			1	1	1	1
24-Aug	0	1	1	1	1	1	1	1			1		1	1	1	1	1
25-Aug	0	1	1	1	1	1	1	1			1		1	1	1	1	1
26-Aug	0	1	1	1	1	1	1				1		1		1	1	1
27-Aug	0	1	0	1	1	1	1	1			1			1	1	1	1
28-Aug	0	1	1	1	1	1	1				1				1	1	1
29-Aug	0	1	1	1	1	1	1	1					1	1	1	1	1
30-Aug	0	1	1	1	1	1	1				1				1	1	1
31-Aug	0	1	1	1	1	1	1	1			1			1	1	1	1
1-Sep	0	1	1	1	1	1	1				1		1	1	1	1	1
2-Sep	0	1	1	1	1	1	1						1	1	1	1	1
3-Sep	0	1	1	1	1	1	1				1		1	1	1	1	1
4-Sep	1	1	1	1	1	1	1	1					1		1	1	1

Table 1. Documentation of Indian Point Sampling Effort, 1974 - 1990. (see footnotes at the bottom of this table explaining codes)

	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
5-Sep	1	1	1	1	1	1	1	1			1			1	1	1	1
6-Sep	1	1	1	1	1	1	1				1		1		1	1	1
7-Sep	1	1	1	1	1	1	1				1		1	1	1	1	1
8-Sep	1	1	1	1	1	1	1						1	1	1	1	1
9-Sep	1	1	1	1	1	1	1						1	1		1	1
10-Sep	1	1	1	1	1	1	1				1		1	1		1	1
11-Sep	0	1	1	1	1	1	1				1		1	1	1	1	1
12-Sep	0	1	1	1	1	1	1				1		1		1	1	1
13-Sep	0	1	1	1	1	1	1				1		1		1	1	1
14-Sep	0	1	1	1	1	1	1				1		1		1	1	1
15-Sep	0	1	1	1	1	1	1						1	1	1	1	1
16-Sep	0	1	1	1	1	1	1						1	1	1	1	1
17-Sep	0	1	1	1	1	1	1				1		1	1	1	1	1
18-Sep	0	1	1	1	1	1	1				1		1	1	1	1	
19-Sep	0	1	0	1	1	1	1				1		1	1	1	1	
20-Sep	0	1	1	1	1	0	1						1	1	1	1	
21-Sep	0	1	1	1	1	0	1				1		1	1		1	
22-Sep	0	1	1	1	1	0	1				1		1	1	1	1	
23-Sep	0	1	1	1	1	0	1				1		1	1	1		
24-Sep	0	1	1	1	1	0	1				1			1	1	1	
25-Sep	0	1	1	1	1	0	1				1		1	1	1	1	
26-Sep	0	1	0	1	1	0	1				1		1	1	1	1	
27-Sep	0	1	1	1	1	0	1				1	1	1	1	1	1	
28-Sep	0	1	1	1	1	0	1				1	1	1	1	1	1	
29-Sep	0	1	1	1	1	0	1				1	1	1	1	1	1	
30-Sep	0	1	1	1	1	0	1				1	1	1	1	1	1	
1-Oct	0	1	1	1	1	0	1				1	1	1	1	1	1	
2-Oct	0	1	1	1	1	0	1				1		1	1	1	1	
3-Oct	0	1	1	1	1	0	1				1		1	1	1	1	
4-Oct	0	1	0	1	1	0	1				1		1	1	1	1	
5-Oct	0	1	1	1	1	0	1				1		1	1	1	1	
6-Oct	0	1	0	1	1	0	1				1	1	1	1	1	1	
7-Oct	0	1	1	1	1	0	1				1	1	1	1	1	1	
8-Oct	0	1	1	1	1	0	1				1		1	1	1	1	
9-Oct	1	1	1	1	1	0	1						1	1	1	1	
10-Oct	1	1	1	1	1	0					1		1	1	1	1	
11-Oct	1	1	1	1	1	0	1				1	1	1			1	
12-Oct	1	1	1	0	1	0	1					1	1	1	1	1	
13-Oct	1	1	1	0	1	0	1				1	1	1	1	1	1	
14-Oct	1	1	1	0	1	0	1						1	1	1	1	
15-Oct	1	1	1	0	1	0	1				1	1	1	1		1	

Table 1. Documentation of Indian Point Sampling Effort, 1974 - 1990. (see footnotes at the bottom of this table explaining codes)

	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
16-Oct	0	1	1	0	1	0	1					1	1	1		1	
17-Oct	0	1	1	0	1	0	1					1	1	1		1	
18-Oct	0	1	1	0	1	0	1						1	1	1	1	
19-Oct	0	1	1	0	1	0	1				1		1	1	1	1	
20-Oct	0	1	1	0	1	0	1				1		1	1		1	
21-Oct	0	1	1	0	1	0	1				1	1	1	1		1	
22-Oct	0	1	1	0	1	0	1					1	1	1		1	
23-Oct	0	1	1	0	1	0	1					1	1	1	1	1	
24-Oct	0	1	1	0	1	0	1					1	1		1	1	
25-Oct	0	1	1	0	1	0	1					1	1	1	1	1	
26-Oct	0	1	1	0	1	0			1			1	1		1	1	
27-Oct	0	1	1	0	1	0			1			1		1	1	1	
28-Oct	0	1	1	0	1	0								1	1	1	
29-Oct	0	1	1	0	1	0			1				1	1	1	1	
30-Oct	0	1	1	0	1	0			1				1	1	1	1	
31-Oct	0	1	1	0	1	0			1				1	1	1	1	
1-Nov	0	1	1	0	1	0							1		1	1	
2-Nov	0	1	1	0	1	0			1			1			1	1	
3-Nov	0	1	1	0	1	0			1				1		1	1	
4-Nov	0	1	1	0	1	0							1	1	1	1	
5-Nov	0	1	1	0	1	0						1	1	1	1	1	
6-Nov	0	1	1	0	1	0							1	1	1	1	
7-Nov	0	1	1	0	1	0			1				1	1	1	1	
8-Nov	0	1	1	0	1	0								1	1	1	
9-Nov	0	1	1	0	1	0							1	1	1	1	
10-Nov	0	1	1	0	1	0						1			1	1	
11-Nov	0	1	1	0	1	0						1			1	1	
12-Nov	0	1	1	0	1	0								1	1	1	
13-Nov	1	1	1	0	0	0						1				1	
14-Nov	1	1	1	0	1	0								1		1	
15-Nov	1	1	1	0	1	0		1									
16-Nov	1	1	1	0	1	0		1					1			1	
17-Nov	1	1	1	0	1	0										1	
18-Nov	1	1	1	0	1	0								1		1	
19-Nov	1	1	1	0	1	0						1		1		1	
20-Nov	0	1	1	0	1	0		1				1		1		1	
21-Nov	0	1	1	0	1	0							1	1		1	
22-Nov	0	1	1	0	1	0	1	1								1	
23-Nov	0	1	0	0	1	0	1									1	
24-Nov	0	1	1	0	1	0	1							1		1	
25-Nov	0	1	1	0	1	0	1	1							1	1	

Table 1. Documentation of Indian Point Sampling Effort, 1974 - 1990. (see footnotes at the bottom of this table explaining codes)

	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
26-Nov	0	1	1	0	1	0	1	1				1			1	1	
27-Nov	0	1	1	0	1	0	1				1				1	1	
28-Nov	0	1	1	0	1	0	1				1					1	
29-Nov	0	1	1	0	1	0	1				1		1				1
30-Nov	0	1	1	0	1	0	1	1			1						1
1-Dec	0	1	1	0	1	0	1	1			1	1			1	1	
2-Dec	0	1	1	0	1	0	1	1			1			1		1	
3-Dec	0	1	1	0	1	0	1	1			1						
4-Dec	0	1	1	0	1	0	1	1			1		1		1	1	
5-Dec	0	1	1	0	1	0		1			1	1	1				1
6-Dec	0	1	1	0	1	0	1	1			1				1		
7-Dec	0	1	1	0	1	0	1	1			1						
8-Dec	0	1	1	0	1	0	1	1			1						
9-Dec	0	1	1	0	1	0	1	1			1			1			
10-Dec	0	1	1	0	1	0	1				1		1		1	1	
11-Dec	0	1	1	0	0	0	1	1			1		1				
12-Dec	0	1	1	0	1	0	1				1		1			1	
13-Dec	0	1	1	0	1	0	1				1		1	1			
14-Dec	0	1	1	0	1	0	1	1			1						
15-Dec	0	1	1	1	1	0	1	1			1		1			1	
16-Dec	0	1	1	1	1	0	1	1			1	1					
17-Dec	0	1	1	1	1	0	1	1			1	1					
18-Dec	1	1	1	1	1	0	1									1	
19-Dec	1	1	1	1	1	0	1										
20-Dec	0	1	1	1	1	0	1						1				
21-Dec	0	1	1	1	1	0	1						1			1	
22-Dec	0	1	1	1	1	0	1										
23-Dec	0	1	1	1	1	0	1				1			1		1	
24-Dec	0	1	1	1	1	0	1	1									
25-Dec	0	1	1	1	1	0	1	1				1					
26-Dec	0	1	1	1	1	0	1				1						
27-Dec	1	1	1	1	1	0	1	1			1					1	
28-Dec	1	1	1	1	1	0	1	1									
29-Dec	1	1	1	1	1	0	1					1					
30-Dec	0	1	1	1	1	0	1	1			1		1				
31-Dec	0	1	1	1	1	0	1				1	1				1	
Total IP3	365	365	366	365	365	365	298	225	36	31	145	109	191	134	193	183	120

Table 1. Documentation of Indian Point Sampling Effort, 1974 - 1990.

Footnote

	Blank cell indicates a day when the Unit was not operating based on inspection of report tables.
	Yellow background indicates a day when the Unit was operating, but a sample was not collected, based on a combination of report table and level file data.
0	Yellow background and red "0" indicate a day when the Unit was not operating (intake volume=0 according to level file).
1	Yellow background and red "1" indicate a day when the Unit was operating, a sample was collected and volume was recorded, based on a combination of report table and level file data.
1	Yellow background and black "1" indicate a day when the Unit was operating, a non-scheduled sample occurred and volume was recorded, based on a combination of report table and level file data.
X	Yellow background and black "X" indicates a day when the Unit was operating , a sample was scheduled according to the report, but no sample record was found in the level files.
	Green background indicates a day when the operating status of the Unit and volume could not be determined, either from the report or the level files.
1	Green background and red "1" indicates a day when the Unit was operating, a sample was collected, but volume was not reported, based on combination of report table and level file data.
1	Green background and black "1" indicates a day when the Unit was operating, a non-scheduled sample was collected, but volume was not reported, based on combination of report table and level file data.

Table 2a. Individual Data File Records of Shortnose Sturgeon Collected by Impingement at Indian Point Unit No. 2 in Each Year, 1974 through 1990.

Unit	Year	Taxon	Date	Sample Number	Total Weight (g)	Length (mmtl)	Condition (alive or dead)	H2O Temp (deg C)	Total Count	Table V-36 DEIS 1999	DSEIS 2008 Table 4-11	Coll. Eff. Adj_Cnt	Comments
2	1974	Shortnose Sturgeon	5-May-74	212508	532			7.0	1			2.19	
2	1974	Shortnose Sturgeon	20-Jun-74	217109	1702			21.5	1			3.02	
2	1974	Shortnose Sturgeon	8-Aug-74	222009	1588			25.7	1			3.39	
2	Total 1974	Shortnose Sturgeon							3	3	NR	8.60	1974 not reported in DESIS Table 4-11
2	1975	Shortnose Sturgeon	20-Jun-75	217109	84			23.0	1			3.14	
2	Total 1975	Shortnose Sturgeon							1	1	3	3.14	
2	1976	Shortnose Sturgeon	16-Feb-76	204708	253			2.5	1			2.01	
2	Total 1976	Shortnose Sturgeon							1	2	2	2.01	
2	1977	Shortnose Sturgeon	23-Jan-77	202309	516			0.5	1			1.94	
2	1977	Shortnose Sturgeon	23-Feb-77	205409	1800			3.0	1			2.03	
2	1977	Shortnose Sturgeon	2-Apr-77	209209	67			5.3	2			4.23	two fish combined; no individual records
2	1977	Shortnose Sturgeon	25-May-77	214509	73			19.2	1			2.85	
2	Total 1977	Shortnose Sturgeon							5	6	11	11.06	
2	1978	Shortnose Sturgeon	9-Jan-78	200904	27			1.7	1			1.98	
2	1978	Shortnose Sturgeon	14-Nov-78	231808	940			14.5	1			2.55	
2	Total 1978	Shortnose Sturgeon							2	2	5	4.53	
2	1979	Shortnose Sturgeon	28-Feb-79	205909	567			0.7	1			1.95	
2	1979	Shortnose Sturgeon	29-Apr-79	211908	625			10.9	1			2.36	
2	Total 1979	Shortnose Sturgeon							2	2	4	4.31	
2	Total 1980	Shortnose Sturgeon							0	0	NR	0.00	
2	Total 1981	Shortnose Sturgeon							0	0	NR	0.00	
2	Total 1982	Shortnose Sturgeon							0	0	NR	0.00	
2	Total 1983	Shortnose Sturgeon							0	0	NR	0.00	
2	1984	Shortnose Sturgeon	30-May-84	215108	673			17.8	1			2.75	
2	Total 1984	Shortnose Sturgeon							1	1	176	2.75	
2	Total 1985	Shortnose Sturgeon							0		NR	0.00	
2	Total 1986	Shortnose Sturgeon							0	0	NR	0.00	
2	1987	Shortnose Sturgeon	8-Mar-87	206707	127	320	D	3.0	1			2.03	
2	1987	Shortnose Sturgeon	27-Feb-87	NS	1845	710	A	4.3	1			2.08	
2	Total 1987	Shortnose Sturgeon							2	1(1)	116	4.11	
2	1988	Shortnose Sturgeon	1-Feb-88	NS	637	580	D	1.6	1			1.98	
2	1988	Shortnose Sturgeon	27-Apr-88	NS	1160	605	D	14.1	1			2.52	
2	1988	Shortnose Sturgeon	4-Nov-88	NS	1785	672	D	13.9	1			2.52	
2	Total 1988	Shortnose Sturgeon							3	0(3)	NR	7.02	
2	Total 1989	Shortnose Sturgeon							0	0	NR	0.00	
2	1989	Shortnose Sturgeon	18-Sep-90	NS	687	443	D	25.5	1			3.37	
2	Total 1990	Shortnose Sturgeon							1	0(1)	NR	3.37	
2	1975-1990	Shortnose Sturgeon							18	18(5)	317	42.31	

NS Collected on a non-scheduled sampling date

NR Not reported

na Not available

1.7 Water temperature estimated from weekly average

Blank space = no data in the SAS Impingement Data Files

(1) Numbers in parentheses indicate number of shortnose sturgeon taken on non-sample days.

Table 2b. Individual Data File Records of Shortnose Sturgeon Collected by Impingement at Indian Point Unit No. 3 in Each Year, 1974 through 1990.

Unit	Year	Taxon	Date	Sample Number	Total Weight (g)	Length (mmtl)	Condition (alive or dead)	H2O Temp (deg C)	Total Count	V-36 DEIS 1999	DSEIS 2008 Table 4-11	Coll. Eff. Adj_Cnt	Comments
3	Total 1974	Shortnose Sturgeon							0	NR	NR	0.00	
3	Total 1975	Shortnose Sturgeon							NR	NR	NR	NR	
3	Total 1976	Shortnose Sturgeon							0	0	NR	0.00	
3	1977	Shortnose Sturgeon	23-Sep-77	326609	99			23.0	1			1.87	
3	Total 1977	Shortnose Sturgeon							1	1	2	1.87	
3	1978	Shortnose Sturgeon	27-Jan-78	302709	65			3.8	1			1.46	
3	1978	Shortnose Sturgeon	2-Mar-78	306109	54			2.9	1			1.44	
3	1978	Shortnose Sturgeon	27-May-78	314709	62			16.9	1			1.72	
3	Total 1978	Shortnose Sturgeon							3	3	5	4.62	
3	1979	Shortnose Sturgeon	3-Apr-79	309309	450			8.0	1			1.53	
3	1979	Shortnose Sturgeon	4-May-79	312407	595			12.2	1			1.61	
3	Total 1979	Shortnose Sturgeon							2	2	3	3.14	
3	1980	Shortnose Sturgeon	29-Apr-80	312004	525			13.3	1			1.64	
3	Total 1980	Shortnose Sturgeon							1	1	2	1.64	
3	Total 1981	Shortnose Sturgeon							0	0	NR	0.00	
3	Total 1982	Shortnose Sturgeon							0	0	NR	0.00	
3	Total 1983	Shortnose Sturgeon							0	0	NR	0.00	
3	1984	Shortnose Sturgeon	19-May-84	314010	598			15.8	1			1.69	
3	Total 1984	Shortnose Sturgeon							1	1	154	1.69	
3	Total 1985	Shortnose Sturgeon							0	0	NR	0.00	
3	Total 1986	Shortnose Sturgeon							0	0	NR	0.00	
3	1987	Shortnose Sturgeon	29-Apr-87	311908	325	433	D	13.0	1			1.63	
3	Total 1987	Shortnose Sturgeon							1	1	55	1.63	
3	1988	Shortnose Sturgeon	19-Aug-88	323210	479	434	D	28.0	1			2.02	
3	Total 1988	Shortnose Sturgeon							1	1	186	2.02	
3	1989	Shortnose Sturgeon	6-Oct-89	NS	600	530	A	21.0	1			1.82	
3	Total 1989	Shortnose Sturgeon							1	0(1)	NR	1.82	
3	Total 1990	Shortnose Sturgeon							0	0	NR	0.00	
3	1975-1990	Shortnose Sturgeon							11	10(1)	407	18.43	

NS Collected on a non-scheduled sampling date

NR Not reported

na Not available

1.7 Water temperature estimated from weekly average

Blank space = no data in the SAS Impingement Data Files

(1) Numbers in parentheses indicate number of shortnose sturgeon taken on non-sample days.

Table 2c. Individual Data File Records of Atlantic Sturgeon Collected by Impingement at Indian Point Unit No. 2 in Each Year, 1974 through 1990.

Unit	Year	Taxon	Date	Sample Number	Total Weight (g)	Length (mmtl)	Condition (alive or dead)	H2O Temp (deg C)	Total Count	V-35 DEIS 1999	DSEIS 2008 Table 4-11	Coll. Eff. Adj. Cnt	Comments
2	1974	Atlantic Sturgeon	25-Jan-74	202508	31			0.5	1			1.94	
2	1974	Atlantic Sturgeon	26-Jan-74	202616	34			0.4	1			1.94	
2	1974	Atlantic Sturgeon	28-Jan-74	202809	33			1.0	1			1.96	
2	1974	Atlantic Sturgeon	19-Feb-74	205009	58			0.2	1			1.93	
2	1974	Atlantic Sturgeon	23-Mar-74	208212	31			5.0	1			2.11	
2	1974	Atlantic Sturgeon	6-Apr-74	209610	20			4.5	1			2.09	
2	1974	Atlantic Sturgeon	8-Apr-74	209807	77			4.9	2			4.20	two fish combined; no individual records
2	1974	Atlantic Sturgeon	9-Apr-74	209909	138			5.0	3			6.32	three fish combined; no individual records
2	1974	Atlantic Sturgeon	9-Apr-74	209917	36			5.0	1			2.11	
2	1974	Atlantic Sturgeon	10-Apr-74	210016	582			4.5	1			2.09	
2	1974	Atlantic Sturgeon	28-Apr-74	211808	40			8.0	1			2.23	
2	1974	Atlantic Sturgeon	30-Apr-74	212008	103			5.3	2			4.23	two fish combined; no individual records
2	1974	Atlantic Sturgeon	1-May-74	212108	218			9.0	3			6.82	three fish combined; no individual records
2	1974	Atlantic Sturgeon	6-May-74	212608	129			11.0	1			2.37	
2	1974	Atlantic Sturgeon	8-May-74	212807	108			10.1	2			4.64	two fish combined; no individual records
2	1974	Atlantic Sturgeon	8-May-74	212815	75			10.1	1			2.32	
2	1974	Atlantic Sturgeon	10-May-74	213008	227			10.5	3			7.02	three fish combined; no individual records
2	1974	Atlantic Sturgeon	12-May-74	213208	39			10.0	1			2.32	
2	1974	Atlantic Sturgeon	20-May-74	214009	83			17.3	1			2.71	
2	1974	Atlantic Sturgeon	22-May-74	214208	207			18.0	2			5.53	two fish combined; no individual records
2	1974	Atlantic Sturgeon	24-May-74	214408	224			17.5	3			8.19	three fish combined; no individual records
2	1974	Atlantic Sturgeon	25-May-74	214508	2142			18.0	6			16.58	six fish combined; no individual records
2	1974	Atlantic Sturgeon	26-May-74	214608	117			17.5	2			5.46	two fish combined; no individual records
2	1974	Atlantic Sturgeon	27-May-74	214708	75			16.0	1			2.64	
2	1974	Atlantic Sturgeon	28-May-74	214808	120			18.0	1			2.76	
2	1974	Atlantic Sturgeon	30-May-74	215008	104			18.0	1			2.76	
2	1974	Atlantic Sturgeon	31-May-74	215108	224			17.0	3			8.10	three fish combined; no individual records
2	1974	Atlantic Sturgeon	1-Jun-74	215208	114			18.1	1			2.77	
2	1974	Atlantic Sturgeon	2-Jun-74	215308	124			17.9	1			2.76	
2	1974	Atlantic Sturgeon	3-Jun-74	215409	107			18.0	1			2.76	
2	1974	Atlantic Sturgeon	4-Jun-74	215508	259			18.0	1			2.76	
2	1974	Atlantic Sturgeon	14-Jun-74	216508	47			19.2	1			2.85	
2	1974	Atlantic Sturgeon	17-Jun-74	216808	45			21.5	1			3.02	
2	1974	Atlantic Sturgeon	24-Jun-74	217508	255			19.0	1			2.83	
2	1974	Atlantic Sturgeon	25-Jun-74	217609	48			21.0	1			2.98	
2	1974	Atlantic Sturgeon	27-Jun-74	217809	168			21.0	1			2.98	
2	1974	Atlantic Sturgeon	30-Jun-74	218109	2			21.5	2			6.04	two fish combined; no individual records
2	1974	Atlantic Sturgeon	1-Jul-74	218209	1			23.0	1			3.14	
2	1974	Atlantic Sturgeon	2-Jul-74	218314	4			23.0	3			9.43	three fish combined; no individual records

Table 2c. Individual Data File Records of Atlantic Sturgeon Collected by Impingement at Indian Point Unit No. 2 in Each Year, 1974 through 1990.

Unit	Year	Taxon	Date	Sample Number	Total Weight (g)	Length (mmtl)	Condition (alive or dead)	H2O Temp (deg C)	Total Count	V-35 DEIS 1999	DSEIS 2008 Table 4-11	Coll. Eff. Adj_Cnt	Comments
2	1974	Atlantic Sturgeon	3-Jul-74	218409	3			24.0	2			6.46	two fish combined; no individual records
2	1974	Atlantic Sturgeon	8-Jul-74	218909	361			24.0	3			9.69	three fish combined; no individual records
2	1974	Atlantic Sturgeon	10-Jul-74	219109	225			25.1	1			3.33	
2	1974	Atlantic Sturgeon	11-Jul-74	219209	215			24.2	1			3.25	
2	1974	Atlantic Sturgeon	12-Jul-74	219309	1			24.0	1			3.23	
2	1974	Atlantic Sturgeon	13-Jul-74	219409	49			24.0	3			9.69	three fish combined; no individual records
2	1974	Atlantic Sturgeon	14-Jul-74	219509	2			23.8	1			3.21	
2	1974	Atlantic Sturgeon	15-Jul-74	219608	2			24.9	1			3.31	
2	1974	Atlantic Sturgeon	16-Jul-74	219708	36			24.8	1			3.31	
2	1974	Atlantic Sturgeon	19-Jul-74	220010	13			25.0	3			9.97	three fish combined; no individual records
2	1974	Atlantic Sturgeon	20-Jul-74	220109	97			25.3	1			3.35	
2	1974	Atlantic Sturgeon	21-Jul-74	220209	51			30.2	1			3.91	
2	1974	Atlantic Sturgeon	24-Jul-74	220509	154			25.0	1			3.32	
2	1974	Atlantic Sturgeon	29-Jul-74	221009	160			24.5	1			3.28	
2	1974	Atlantic Sturgeon	16-Aug-74	222809	56			26.0	1			3.42	
2	1974	Atlantic Sturgeon	17-Aug-74	222909	118			26.0	2			6.85	two fish combined; no individual records
2	1974	Atlantic Sturgeon	21-Aug-74	223309	15			23.0	1			3.14	
2	1974	Atlantic Sturgeon	22-Aug-74	223409	337			27.2	2			7.10	two fish combined; no individual records
2	1974	Atlantic Sturgeon	23-Aug-74	223509	177			26.5	1			3.48	
2	1974	Atlantic Sturgeon	1-Sep-74	224409	12			28.0	1			3.64	
2	1974	Atlantic Sturgeon	3-Sep-74	224609	13			24.9	1			3.31	
2	1974	Atlantic Sturgeon	6-Sep-74	224909	9			24.8	1			3.31	
2	1974	Atlantic Sturgeon	8-Sep-74	225109	6			24.3	1			3.26	
2	1974	Atlantic Sturgeon	13-Oct-74	228609	18			16.5	1			2.67	
2	1974	Atlantic Sturgeon	16-Oct-74	228922	25			17.0	1			2.70	
2	1974	Atlantic Sturgeon	3-Nov-74	230717	604			13.7	1			2.50	
2	1974	Atlantic Sturgeon	6-Nov-74	231006	139			15.0	1			2.58	
2	1974	Atlantic Sturgeon	21-Nov-74	232509	33			10.0	1			2.32	
2	1974	Atlantic Sturgeon	10-Dec-74	234408	127			5.7	1			2.13	
2	1974	Atlantic Sturgeon	13-Dec-74	234718	76			5.0	1			2.11	
2	Total 1974	Atlantic Sturgeon							101	100	NR	281.53	1974 not reported in DSEIS Table 4-11
2	1975	Atlantic Sturgeon	9-Jan-75	200922	27			5.0	1			2.11	
2	1975	Atlantic Sturgeon	17-Apr-75	210709	93			7.0	1			2.19	
2	1975	Atlantic Sturgeon	18-Apr-75	210809	71			7.0	1			2.19	
2	1975	Atlantic Sturgeon	19-Apr-75	210902	116			6.0	2			4.29	two fish combined; no individual records
2	1975	Atlantic Sturgeon	19-Apr-75	210913	232			6.0	1			2.14	
2	1975	Atlantic Sturgeon	21-Apr-75	211109	184			7.0	2			4.37	two fish combined; no individual records
2	1975	Atlantic Sturgeon	23-Apr-75	211309	380			7.5	4			8.83	four fish combined; no individual records
2	1975	Atlantic Sturgeon	23-Apr-75	211315	109			7.5	2			4.41	two fish combined; no individual records

Table 2c. Individual Data File Records of Atlantic Sturgeon Collected by Impingement at Indian Point Unit No. 2 in Each Year, 1974 through 1990.

Unit	Year	Taxon	Date	Sample Number	Total Weight (g)	Length (mmtl)	Condition (alive or dead)	H2O Temp (deg C)	Total Count	V-35 DEIS 1999	DSEIS 2008 Table 4-11	Coll. Eff. Adj_Cnt	Comments
2	1975	Atlantic Sturgeon	23-Apr-75	211324	136			7.5	2			4.41	two fish combined; no individual records
2	1975	Atlantic Sturgeon	24-Apr-75	211409	492			8.0	6			13.37	six fish combined; no individual records
2	1975	Atlantic Sturgeon	24-Apr-75	211422	458			8.0	7			15.59	seven fish combined; no individual records
2	1975	Atlantic Sturgeon	25-Apr-75	211505	257			8.3	4			8.96	four fish combined; no individual records
2	1975	Atlantic Sturgeon	26-Apr-75	211609	576			5.5	6			12.75	
2	1975	Atlantic Sturgeon	27-Apr-75	211708	396			7.2	3			6.58	three fish combined; no individual records
2	1975	Atlantic Sturgeon	28-Apr-75	211809	415			10.0	5			11.59	five fish combined; no individual records
2	1975	Atlantic Sturgeon	28-Apr-75	211820	42			10.0	1			2.32	
2	1975	Atlantic Sturgeon	29-Apr-75	211906	193			10.0	3			6.95	
2	1975	Atlantic Sturgeon	29-Apr-75	211909	209			10.0	2			4.64	two fish combined; no individual records
2	1975	Atlantic Sturgeon	29-Apr-75	211912	317			10.0	3			6.95	three fish combined; no individual records
2	1975	Atlantic Sturgeon	29-Apr-75	211920	153			10.0	2			4.64	two fish combined; no individual records
2	1975	Atlantic Sturgeon	30-Apr-75	212009	293			9.2	4			9.12	four fish combined; no individual records
2	1975	Atlantic Sturgeon	30-Apr-75	212020	131			9.2	2			4.56	two fish combined; no individual records
2	1975	Atlantic Sturgeon	1-May-75	212109	289			11.0	3			7.10	three fish combined; no individual records
2	1975	Atlantic Sturgeon	2-May-75	212209	167			11.3	3			7.14	three fish combined; no individual records
2	1975	Atlantic Sturgeon	3-May-75	212309	177			10.5	1			2.34	
2	1975	Atlantic Sturgeon	7-May-75	212709	375			14.0	1			2.52	
2	1975	Atlantic Sturgeon	9-May-75	212909	401			14.0	3			7.56	three fish combined; no individual records
2	1975	Atlantic Sturgeon	10-May-75	213009	68			13.0	1			2.47	
2	1975	Atlantic Sturgeon	18-May-75	213809	137			15.0	2			5.16	two fish combined; no individual records
2	1975	Atlantic Sturgeon	20-May-75	214009	54			16.5	1			2.67	
2	1975	Atlantic Sturgeon	23-May-75	214309	166			17.0	2			5.40	two fish combined; no individual records
2	1975	Atlantic Sturgeon	6-Jun-75	215709	87			21.0	1			2.98	
2	1975	Atlantic Sturgeon	7-Jun-75	215809	655			21.2	1			2.99	
2	1975	Atlantic Sturgeon	10-Jun-75	216109	174			21.3	1			3.00	
2	1975	Atlantic Sturgeon	12-Jun-75	216309	89			21.0	1			2.98	
2	1975	Atlantic Sturgeon	15-Jun-75	216609	143			21.8	1			3.04	
2	1975	Atlantic Sturgeon	16-Jun-75	216709	41			21.0	1			2.98	
2	1975	Atlantic Sturgeon	20-Jun-75	217109	215			23.0	1			3.14	
2	1975	Atlantic Sturgeon	21-Jun-75	217209	45			24.0	1			3.23	
2	1975	Atlantic Sturgeon	22-Jun-75	217309	101			24.5	1			3.28	
2	1975	Atlantic Sturgeon	25-Jun-75	217609	71			25.0	1			3.32	
2	1975	Atlantic Sturgeon	26-Jun-75	217709	122			24.0	1			3.23	
2	1975	Atlantic Sturgeon	1-Jul-75	218209	112			24.5	1			3.28	
2	1975	Atlantic Sturgeon	2-Jul-75	218309	89			25.0	1			3.32	
2	1975	Atlantic Sturgeon	2-Jul-75	218314	107			25.0	1			3.32	
2	1975	Atlantic Sturgeon	3-Jul-75	218409	559			25.0	3			9.97	three fish combined; no individual records
2	1975	Atlantic Sturgeon	5-Jul-75	218609	104			26.5	1			3.48	

Table 2c. Individual Data File Records of Atlantic Sturgeon Collected by Impingement at Indian Point Unit No. 2 in Each Year, 1974 through 1990.

Unit	Year	Taxon	Date	Sample Number	Total Weight (g)	Length (mmtl)	Condition (alive or dead)	H2O Temp (deg C)	Total Count	V-35 DEIS 1999	DSEIS 2008 Table 4-11	Coll. Eff. Adj_Cnt	Comments
2	1975	Atlantic Sturgeon	6-Jul-75	218709	116			27.0	1			3.53	
2	1975	Atlantic Sturgeon	7-Jul-75	218809	396			27.0	1			3.53	
2	1975	Atlantic Sturgeon	8-Jul-75	218909	117			25.0	1			3.32	
2	1975	Atlantic Sturgeon	10-Jul-75	219109	114			27.0	1			3.53	
2	1975	Atlantic Sturgeon	18-Jul-75	219909	124			26.0	1			3.42	
2	1975	Atlantic Sturgeon	22-Jul-75	220309	14			27.0	1			3.53	
2	1975	Atlantic Sturgeon	24-Jul-75	220509	2			27.0	1			3.53	
2	1975	Atlantic Sturgeon	27-Jul-75	220809	3			26.5	1			3.48	
2	1975	Atlantic Sturgeon	20-Aug-75	223208	472			26.0	1			3.42	
2	1975	Atlantic Sturgeon	21-Aug-75	223308	106			26.0	1			3.42	
2	1975	Atlantic Sturgeon	3-Sep-75	224608	566			24.0	1			3.23	
2	1975	Atlantic Sturgeon	5-Sep-75	224814	77			24.2	1			3.25	
2	1975	Atlantic Sturgeon	15-Sep-75	225808	585			22.0	1			3.06	
2	1975	Atlantic Sturgeon	11-Oct-75	228408	42			17.0	1			2.70	
2	1975	Atlantic Sturgeon	13-Oct-75	228608	105			16.9	1			2.69	
2	1975	Atlantic Sturgeon	11-Nov-75	231508	194			13.0	1			2.47	
2	1975	Atlantic Sturgeon	12-Nov-75	231608	81			12.6	1			2.45	
2	1975	Atlantic Sturgeon	16-Nov-75	232009	88			11.5	1			2.39	
2	1975	Atlantic Sturgeon	28-Dec-75	236208	265			2.6	1			2.02	
2	Total 1975	Atlantic Sturgeon							118	118	302	301.81	
2	1976	Atlantic Sturgeon	21-Jan-76	202109	814			0.5	2			3.89	
2	1976	Atlantic Sturgeon	22-Jan-76	202209	305			1.0	1			1.96	
2	1976	Atlantic Sturgeon	28-Jan-76	202808	162			1.0	1			1.96	
2	1976	Atlantic Sturgeon	12-Feb-76	204309	80			1.6	1			1.98	
2	1976	Atlantic Sturgeon	23-Mar-76	208309	419			5.0	1			2.11	
2	1976	Atlantic Sturgeon	14-Oct-76	228809	99			18.2	1			2.78	
2	1976	Atlantic Sturgeon	31-Dec-76	236614	66			1.0	1			1.96	
2	Total 1976	Atlantic Sturgeon							8	8	17	16.64	
2	1977	Atlantic Sturgeon	5-Jan-77	200509	724			1.9	1			1.99	
2	1977	Atlantic Sturgeon	12-Jan-77	201209	318			2.0	2			3.99	two fish combined; no individual records
2	1977	Atlantic Sturgeon	24-Jan-77	202409	404			1.7	1			1.99	
2	1977	Atlantic Sturgeon	25-Jan-77	202509	64			3.1	1			2.03	
2	1977	Atlantic Sturgeon	31-Jan-77	203109	373			1.0	1			1.96	
2	1977	Atlantic Sturgeon	23-Feb-77	205409	310			3.0	1			2.03	
2	1977	Atlantic Sturgeon	16-Mar-77	207509	62			5.2	1			2.11	
2	1977	Atlantic Sturgeon	28-Mar-77	208709	103			5.0	1			2.11	
2	1977	Atlantic Sturgeon	30-Mar-77	208909	67			5.5	1			2.12	
2	1977	Atlantic Sturgeon	31-Mar-77	209009	153			5.4	2			4.24	two fish combined; no individual records
2	1977	Atlantic Sturgeon	1-Apr-77	209109	32			6.3	1			2.16	

Table 2c. Individual Data File Records of Atlantic Sturgeon Collected by Impingement at Indian Point Unit No. 2 in Each Year, 1974 through 1990.

Unit	Year	Taxon	Date	Sample Number	Total Weight (g)	Length (mmtl)	Condition (alive or dead)	H2O Temp (deg C)	Total Count	V-35 DEIS 1999	DSEIS 2008 Table 4-11	Coll. Eff. Adj_Cnt	Comments
2	1977	Atlantic Sturgeon	6-Apr-77	209608	108			8.0	2			4.46	two fish combined; no individual records
2	1977	Atlantic Sturgeon	7-Apr-77	209710	55			7.1	1			2.19	
2	1977	Atlantic Sturgeon	8-Apr-77	209809	42			10.0	1			2.32	
2	1977	Atlantic Sturgeon	9-Apr-77	209909	43			7.5	1			2.21	
2	1977	Atlantic Sturgeon	10-Apr-77	210009	182			6.8	3			6.53	three fish combined; no individual records
2	1977	Atlantic Sturgeon	11-Apr-77	210109	216			8.9	3			6.80	three fish combined; no individual records
2	1977	Atlantic Sturgeon	12-Apr-77	210208	228			8.0	3			6.68	three fish combined; no individual records
2	1977	Atlantic Sturgeon	13-Apr-77	210308	101			10.0	2			4.64	two fish combined; no individual records
2	1977	Atlantic Sturgeon	8-Jun-77	215909	1047			19.2	2			5.69	two fish combined; no individual records
2	1977	Atlantic Sturgeon	15-Jun-77	216609	75			20.2	1			2.92	
2	1977	Atlantic Sturgeon	9-Aug-77	222109	244			27.0	1			3.53	
2	1977	Atlantic Sturgeon	20-Aug-77	223209	28			27.2	1			3.55	
2	1977	Atlantic Sturgeon	29-Aug-77	224109	13			26.0	1			3.42	
2	1977	Atlantic Sturgeon	14-Sep-77	225722	267			24.8	1			3.31	
2	1977	Atlantic Sturgeon	15-Sep-77	225809	173			25.6	1			3.38	
2	1977	Atlantic Sturgeon	26-Sep-77	226909	119			21.8	1			3.04	
2	1977	Atlantic Sturgeon	31-Oct-77	230409	364			11.5	1			2.39	
2	1977	Atlantic Sturgeon	4-Nov-77	230809	12			11.1	1			2.37	
2	1977	Atlantic Sturgeon	6-Nov-77	231009	300			12.1	1			2.42	
2	1977	Atlantic Sturgeon	30-Nov-77	233404	54			7.0	1			2.19	
2	1977	Atlantic Sturgeon	5-Dec-77	233909	252			4.3	1			2.08	
2	1977	Atlantic Sturgeon	22-Dec-77	235624	168			2.5	1			2.01	
2	Total 1977	Atlantic Sturgeon							44	44	105	104.85	
2	1978	Atlantic Sturgeon	7-Jan-78	200704	96			1.5	1			1.98	
2	1978	Atlantic Sturgeon	7-Jan-78	200709	56			1.5	1			1.98	
2	1978	Atlantic Sturgeon	8-Jan-78	200809	79			2.5	1			2.01	
2	1978	Atlantic Sturgeon	20-Jan-78	202024	54			0.6	1			1.95	
2	1978	Atlantic Sturgeon	22-Jan-78	202209	67			1.2	2			3.94	two fish combined; no individual records
2	1978	Atlantic Sturgeon	23-Jan-78	202324	80			1.0	1			1.96	
2	1978	Atlantic Sturgeon	27-Jan-78	202709	94			0.5	1			1.94	
2	1978	Atlantic Sturgeon	29-Jun-78	218010	80			23.0	1			3.14	
2	1978	Atlantic Sturgeon	19-Jul-78	220009	3			24.5	1			3.28	
2	1978	Atlantic Sturgeon	27-Jul-78	220809	219			24.9	1			3.31	
2	1978	Atlantic Sturgeon	14-Sep-78	225705	329			24.5	1			3.28	
2	1978	Atlantic Sturgeon	7-Nov-78	231108	32			16.4	1			2.66	
2	1978	Atlantic Sturgeon	8-Nov-78	231208	135			15.0	1			2.58	
2	1978	Atlantic Sturgeon	15-Dec-78	234908	99			6.5	1			2.16	
2	1978	Atlantic Sturgeon	20-Dec-78	235408	15			5.1	1			2.11	
2	Total 1978	Atlantic Sturgeon							16	16	38	38.28	

Table 2c. Individual Data File Records of Atlantic Sturgeon Collected by Impingement at Indian Point Unit No. 2 in Each Year, 1974 through 1990.

Unit	Year	Taxon	Date	Sample Number	Total Weight (g)	Length (mmtl)	Condition (alive or dead)	H2O Temp (deg C)	Total Count	V-35 DEIS 1999	DSEIS 2008 Table 4-11	Coll. Eff. Adj_Cnt	Comments
2	1979	Atlantic Sturgeon	7-Jan-79	200708	27			1.7	1			1.99	
2	1979	Atlantic Sturgeon	22-Jan-79	202208	80			0.5	1			1.94	
2	1979	Atlantic Sturgeon	26-Jan-79	202608	60			0.0	1			1.93	
2	1979	Atlantic Sturgeon	30-Jan-79	203008	72			0.5	1			1.94	
2	1979	Atlantic Sturgeon	2-Feb-79	203309	110			2.2	1			2.00	
2	1979	Atlantic Sturgeon	9-Feb-79	204008	44			1.2	1			1.97	
2	1979	Atlantic Sturgeon	10-Feb-79	204108	132			0.1	1			1.93	
2	1979	Atlantic Sturgeon	13-Feb-79	204408	174			3.0	1			2.03	
2	1979	Atlantic Sturgeon	22-Feb-79	205308	195			0.0	1			1.93	
2	1979	Atlantic Sturgeon	24-Feb-79	205509	250			2.9	1			2.03	
2	1979	Atlantic Sturgeon	26-Feb-79	205708	207			3.0	1			2.03	
2	1979	Atlantic Sturgeon	2-Apr-79	209206	136			8.2	1			2.24	
2	1979	Atlantic Sturgeon	15-Apr-79	210508	180			7.0	1			2.19	
2	1979	Atlantic Sturgeon	19-Apr-79	210908	71			6.4	1			2.16	
2	1979	Atlantic Sturgeon	23-Apr-79	211305	165			8.1	1			2.23	
2	1979	Atlantic Sturgeon	25-Apr-79	211508	165			9.0	1			2.27	
2	1979	Atlantic Sturgeon	28-Apr-79	211808	295			10.5	2			4.68	two fish combined; no individual records
2	1979	Atlantic Sturgeon	17-Sep-79	226008	24			24.0	1			3.23	
2	1979	Atlantic Sturgeon	23-Sep-79	226608	265			20.5	2			5.88	two fish combined; no individual records
2	1979	Atlantic Sturgeon	28-Sep-79	227108	244			21.1	1			2.99	
2	1979	Atlantic Sturgeon	29-Sep-79	227207	114			21.2	1			2.99	
2	1979	Atlantic Sturgeon	11-Oct-79	228418	210			17.0	1			2.70	
2	1979	Atlantic Sturgeon	16-Oct-79	228908	160			15.5	1			2.61	
2	1979	Atlantic Sturgeon	20-Oct-79	229318	39			17.2	1			2.71	
2	1979	Atlantic Sturgeon	28-Oct-79	230108	200			13.5	1			2.49	
2	1979	Atlantic Sturgeon	5-Nov-79	230908	282			13.5	1			2.49	
2	1979	Atlantic Sturgeon	19-Nov-79	232308	685			10.5	1			2.34	
2	1979	Atlantic Sturgeon	20-Nov-79	232418				10.5	1			2.34	
2	1979	Atlantic Sturgeon	21-Nov-79	232518	685			10.4	1			2.34	
2	1979	Atlantic Sturgeon	14-Dec-79	234808				6.0	1			2.14	
2	Total 1979	Atlantic Sturgeon							32	32	75	74.75	
2	1980	Atlantic Sturgeon	1-Jan-80	200108	38			5.1	1			2.11	
2	1980	Atlantic Sturgeon	4-Jan-80	200408	575			3.0	1			2.03	
2	1980	Atlantic Sturgeon	6-Mar-80	206611	905			1.9	1			1.99	
2	1980	Atlantic Sturgeon	24-Mar-80	208408	101			5.2	1			2.11	
2	1980	Atlantic Sturgeon	1-Apr-80	209208	109			6.8	1			2.18	
2	1980	Atlantic Sturgeon	19-Apr-80	211014	360			10.6	1			2.35	
2	1980	Atlantic Sturgeon	27-Aug-80	224008	515			26.0	1			3.42	
2	1980	Atlantic Sturgeon	30-Aug-80	224309	228			30.0	1			3.89	

Table 2c. Individual Data File Records of Atlantic Sturgeon Collected by Impingement at Indian Point Unit No. 2 in Each Year, 1974 through 1990.

Unit	Year	Taxon	Date	Sample Number	Total Weight (g)	Length (mmtl)	Condition (alive or dead)	H2O Temp (deg C)	Total Count	V-35 DEIS 1999	DSEIS 2008 Table 4-11	Coll. Eff. Adj. Cnt	Comments
2	1980	Atlantic Sturgeon	4-Sep-80	224808	210			28.0	1			3.64	
2	Total 1980	Atlantic Sturgeon							9	9	24	23.72	
2	1981	Atlantic Sturgeon	19-Oct-81	229207	434			17.0	1			2.70	
2	1981	Atlantic Sturgeon	20-Oct-81	229308	434			17.0	1			2.70	
2	1981	Atlantic Sturgeon	30-Oct-81	230308	223			15.5	1			2.61	
2	Total 1981	Atlantic Sturgeon							3	3	221	8.01	
2	1982	Atlantic Sturgeon	27-Apr-82	211708	34			11.4	1			2.39	
2	Total 1982	Atlantic Sturgeon							1	1	217	2.39	
2	1983	Atlantic Sturgeon	17-Dec-83	235107.94	69			3.0	1			2.03	
2	1983	Atlantic Sturgeon	19-Dec-83	235307.94	24			2.5	1			2.01	
2	1983	Atlantic Sturgeon	22-Dec-83	235609.94	48			4.0	1			2.07	
2	Total 1983	Atlantic Sturgeon							3	3	149	6.11	
2	1984	Atlantic Sturgeon	25-Jan-84	202508	32			2.0	1			2.00	
2	1984	Atlantic Sturgeon	22-Mar-84	208208	884			4.0	1			2.07	
2	1984	Atlantic Sturgeon	29-Nov-84	233408	27			11.0	1			2.37	
2	Total 1984	Atlantic Sturgeon							3	3	363	6.43	
2	1985	Atlantic Sturgeon	11-Jan-85	2002	83	268	D	4.0	1			2.07	
2	1985	Atlantic Sturgeon	15-Jan-85	2006	95	302	D	1.2	1			1.97	
2	1985	Atlantic Sturgeon	30-Jan-85	2070	80	250	A	2.0	1			2.00	
2	1985	Atlantic Sturgeon	5-Feb-85	2097	57	na	na	3.0	1			2.03	Not in report table; record in LV5
2	1985	Atlantic Sturgeon	28-Feb-85	2211	105	351	A	2.5	1			2.01	
2	1985	Atlantic Sturgeon	28-Feb-85	2211	130	326	A	2.5	1			2.01	
2	1985	Atlantic Sturgeon	29-Oct-85	2889	210	354	D	16.1	1			2.64	
2	1985	Atlantic Sturgeon	19-Mar-85	2302	25	189	D	7.1	1			2.19	In report table; no record in LV5
2	1985	Atlantic Sturgeon	13-Apr-85	NS	168	403	D	9.9	1			2.31	
2	Total 1985	Atlantic Sturgeon							9	7(1)	460	19.23	
2	1986	Atlantic Sturgeon	6-Jul-86	218710	380	466	A	25.0	1			3.32	
2	1986	Atlantic Sturgeon	5-Dec-86	233908	525	474	A	7.8	1			2.22	
2	Total 1986	Atlantic Sturgeon							2	2	696	5.54	
2	1987	Atlantic Sturgeon	2-May-87	NS	181	326	D	14.6	1			2.55	
2	1987	Atlantic Sturgeon	8-Aug-87	NS	251	432	D	26.3	1			3.46	
2	Total 1987	Atlantic Sturgeon							2	(2)	NR	6.01	
2	1988	Atlantic Sturgeon	4-Mar-88	NS	325	462	A	5.1	1			2.11	
2	Total 1988	Atlantic Sturgeon							1	(1)	NR	2.11	
2	Total 1989	Atlantic Sturgeon							0	0	NR	0.00	
2	Total 1990	Atlantic Sturgeon							0	0	NR	0.00	
2	1975-1990	Atlantic Sturgeon							251	346(4)	2667	615.88	

Table 2c. Individual Data File Records of Atlantic Sturgeon Collected by Impingement at Indian Point Unit No. 2 in Each Year, 1974 through 1990.

Unit	Year	Taxon	Date	Sample Number	Total Weight (g)	Length (mmtl)	Condition (alive or dead)	H2O Temp (deg C)	Total Count	V-35 DEIS 1999	DSEIS 2008 Table 4-11	Coll. Eff. Adj_Cnt	Comments
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NS Collected on a non-scheduled sampling date

NR Not reported

na Not available

1.7 Water temperature estimated from weekly average

Blank space = no data in the SAS Impingement Data Files

(1) Numbers in parentheses indicate number of shortnose sturgeon taken on non-sample days.

Table 2d. Individual Data File Records of Atlantic Sturgeon Collected by Impingement at Indian Point Unit No. 3 in Each Year, 1974 through 1990.

Unit	Year	Taxon	Date	Sample Number	Total Weight (g)	Length (mmtl)	Condition (alive or dead)	H2O Temp (deg C)	Total Count	V-35 DEIS 1999	DSEIS 2008 Table 4-11	Coll. Eff. Adj_Cnt	Comments
3	1974	Atlantic Sturgeon	18-Apr-74	310809	40			4.5	1			1.47	
3	1974	Atlantic Sturgeon	19-Apr-74	310902	52			5.0	1			1.48	
3	1974	Atlantic Sturgeon	22-Apr-74	311201	73			4.5	1			1.47	
3	1974	Atlantic Sturgeon	12-Jun-74	316318	51			19.8	1			1.79	
3	1974	Atlantic Sturgeon	21-Jun-74	317202	226			23.8	1			1.89	
3	1974	Atlantic Sturgeon	24-Jun-74	317506	57			22.0	1			1.84	
3	1974	Atlantic Sturgeon	19-Jul-74	320002	4			25.5	1			1.94	
3	1974	Atlantic Sturgeon	19-Jul-74	320006	10			25.5	1			1.94	
3	1974	Atlantic Sturgeon	11-Aug-74	322306	140			25.7	1			1.95	
3	1974	Atlantic Sturgeon	29-Dec-74	336310	76			4.0	1			1.46	
3	Total 1974	Atlantic Sturgeon							10	12	NR	17.24	
3	Total 1975	Atlantic Sturgeon							NR	NR	NR	NR	
3	1976	Atlantic Sturgeon	28-Apr-76	311910	35			11.0	1			1.59	
3	1976	Atlantic Sturgeon	12-Jun-76	316410	672			17.8	1			1.74	
3	1976	Atlantic Sturgeon	11-Jul-76	319310	31			26.2	1			1.97	
3	1976	Atlantic Sturgeon	13-Aug-76	322610	70			24.5	1			1.91	
3	1976	Atlantic Sturgeon	4-Sep-76	324810	727			23.5	1			1.89	
3	1976	Atlantic Sturgeon	9-Oct-76	328310	132			20.1	1			1.79	
3	1976	Atlantic Sturgeon	24-Oct-76	329813	35			13.0	1			1.63	
3	1976	Atlantic Sturgeon	2-Nov-76	330710	30			10.0	1			1.57	
3	Total 1976	Atlantic Sturgeon							8	8	14	14.09	
3	1977	Atlantic Sturgeon	16-Mar-77	307510	84			5.9	1			1.49	
3	1977	Atlantic Sturgeon	18-Mar-77	307709	490			4.8	1			1.47	
3	1977	Atlantic Sturgeon	24-Mar-77	308309	116			4.5	2			2.94	two fish combined; no individual records
3	1977	Atlantic Sturgeon	26-Mar-77	308509	107			7.2	2			3.03	two fish combined; no individual records
3	1977	Atlantic Sturgeon	28-Mar-77	308709	162			6.2	3			4.50	three fish combined; no individual records
3	1977	Atlantic Sturgeon	29-Mar-77	308809	40			6.2	1			1.50	
3	1977	Atlantic Sturgeon	30-Mar-77	308909	285			6.3	5			7.50	five fish combined; no individual records
3	1977	Atlantic Sturgeon	31-Mar-77	309009	187			5.4	3			4.45	three fish combined; no individual records
3	1977	Atlantic Sturgeon	1-Apr-77	309109	114			6.8	2			3.02	two fish combined; no individual records
3	1977	Atlantic Sturgeon	2-Apr-77	309209	94			6.0	1			1.50	
3	1977	Atlantic Sturgeon	4-Apr-77	309409	91			6.9	2			3.02	two fish combined; no individual records
3	1977	Atlantic Sturgeon	5-Apr-77	309509	41			7.9	1			1.53	
3	1977	Atlantic Sturgeon	5-Apr-77	309519	200			7.9	3			4.59	three fish combined; no individual records
3	1977	Atlantic Sturgeon	5-Apr-77	309599	91			7.9	1			1.53	
3	1977	Atlantic Sturgeon	14-Apr-77	310409	304			9.5	5			7.80	five fish combined; no individual records
3	1977	Atlantic Sturgeon	15-Apr-77	310509	894			10.0	6			9.42	six fish combined; no individual records
3	1977	Atlantic Sturgeon	15-Apr-77	310514	129			10.0	1			1.57	

Table 2d. Individual Data File Records of Atlantic Sturgeon Collected by Impingement at Indian Point Unit No. 3 in Each Year, 1974 through 1990.

Unit	Year	Taxon	Date	Sample Number	Total Weight (g)	Length (mmtl)	Condition (alive or dead)	H2O Temp (deg C)	Total Count	V-35 DEIS 1999	DSEIS 2008 Table 4-11	Coll. Eff. Adj_Cnt	Comments
3	1977	Atlantic Sturgeon	16-Apr-77	310610	49			11.2	1			1.59	
3	1977	Atlantic Sturgeon	17-Apr-77	310710	328			9.5	5			7.80	five fish combined; no individual records
3	1977	Atlantic Sturgeon	18-Apr-77	310809	475			11.5	7			11.19	seven fish combined; no individual records
3	1977	Atlantic Sturgeon	19-Apr-77	310909	145			11.0	2			3.18	two fish combined; no individual records
3	1977	Atlantic Sturgeon	19-Apr-77	310912	84			11.0	1			1.59	
3	1977	Atlantic Sturgeon	19-Apr-77	310913	75			11.0	1			1.59	
3	1977	Atlantic Sturgeon	19-Apr-77	310920	76			11.0	1			1.59	
3	1977	Atlantic Sturgeon	19-Apr-77	310921	223			11.0	1			1.59	
3	1977	Atlantic Sturgeon	19-Apr-77	310999	114			11.0	2			3.18	two fish combined; no individual records
3	1977	Atlantic Sturgeon	20-Apr-77	311000	727			10.0	4			6.28	four fish combined; no individual records
3	1977	Atlantic Sturgeon	20-Apr-77	311005	127			10.0	2			3.14	two fish combined; no individual records
3	1977	Atlantic Sturgeon	20-Apr-77	311009	297			10.0	5			7.85	five fish combined; no individual records
3	1977	Atlantic Sturgeon	20-Apr-77	311024	255			10.0	3			4.71	three fish combined; no individual records
3	1977	Atlantic Sturgeon	21-Apr-77	311109	282			10.1	4			6.29	four fish combined; no individual records
3	1977	Atlantic Sturgeon	22-Apr-77	311201	145			11.0	2			3.18	two fish combined; no individual records
3	1977	Atlantic Sturgeon	22-Apr-77	311209	157			11.0	2			3.18	two fish combined; no individual records
3	1977	Atlantic Sturgeon	23-Apr-77	311300	115			11.0	2			3.18	two fish combined; no individual records
3	1977	Atlantic Sturgeon	23-Apr-77	311310	354			11.0	4			6.36	four fish combined; no individual records
3	1977	Atlantic Sturgeon	24-Apr-77	311406	123			12.2	2			3.23	two fish combined; no individual records
3	1977	Atlantic Sturgeon	24-Apr-77	311410	341			12.2	3			4.84	three fish combined; no individual records
3	1977	Atlantic Sturgeon	25-Apr-77	311509	255			11.3	3			4.79	three fish combined; no individual records
3	1977	Atlantic Sturgeon	26-Apr-77	311609	247			11.0	3			4.77	three fish combined; no individual records
3	1977	Atlantic Sturgeon	27-Apr-77	311709	145			14.5	2			3.32	two fish combined; no individual records
3	1977	Atlantic Sturgeon	28-Apr-77	311809	86			13.1	1			1.63	
3	1977	Atlantic Sturgeon	2-May-77	312209	65			14.0	1			1.65	
3	1977	Atlantic Sturgeon	4-May-77	312409	83			14.5	1			1.66	
3	1977	Atlantic Sturgeon	5-May-77	312509	65			14.4	1			1.66	
3	1977	Atlantic Sturgeon	6-May-77	312613	68			13.2	1			1.63	
3	1977	Atlantic Sturgeon	7-May-77	312708	101			15.0	1			1.67	
3	1977	Atlantic Sturgeon	8-May-77	312808	182			15.0	2			3.35	two fish combined; no individual records
3	1977	Atlantic Sturgeon	12-May-77	313209	50			14.0	1			1.65	
3	1977	Atlantic Sturgeon	13-May-77	313309	92			14.0	1			1.65	
3	1977	Atlantic Sturgeon	16-May-77	313609	83			14.9	1			1.67	
3	1977	Atlantic Sturgeon	17-May-77	313709	121			14.5	1			1.66	
3	1977	Atlantic Sturgeon	18-May-77	313809	301			17.1	1			1.72	
3	1977	Atlantic Sturgeon	21-May-77	314109	105			18.0	1			1.74	
3	1977	Atlantic Sturgeon	28-May-77	314810	25			20.1	1			1.79	
3	1977	Atlantic Sturgeon	1-Jun-77	315209	623			19.6	2			3.56	two fish combined; no individual records

Table 2d. Individual Data File Records of Atlantic Sturgeon Collected by Impingement at Indian Point Unit No. 3 in Each Year, 1974 through 1990.

Unit	Year	Taxon	Date	Sample Number	Total Weight (g)	Length (mmtl)	Condition (alive or dead)	H2O Temp (deg C)	Total Count	V-35 DEIS 1999	DSEIS 2008 Table 4-11	Coll. Eff. Adj_Cnt	Comments
3	1977	Atlantic Sturgeon	2-Jun-77	315309	142			21.2	1			1.82	
3	1977	Atlantic Sturgeon	3-Jun-77	315409	111			21.6	2			3.67	two fish combined; no individual records
3	1977	Atlantic Sturgeon	6-Jun-77	315709	141			21.0	1			1.82	
3	1977	Atlantic Sturgeon	8-Jun-77	315909	690			19.1	1			1.77	
3	1977	Atlantic Sturgeon	9-Jun-77	316009	150			18.6	1			1.76	
3	1977	Atlantic Sturgeon	10-Jun-77	316109	109			18.9	2			3.53	two fish combined; no individual records
3	1977	Atlantic Sturgeon	14-Jun-77	316509	153			20.8	1			1.81	
3	1977	Atlantic Sturgeon	23-Jun-77	317409	32			23.0	1			1.87	
3	1977	Atlantic Sturgeon	2-Jul-77	318309	200			24.6	1			1.92	
3	1977	Atlantic Sturgeon	3-Jul-77	318409	90			22.7	1			1.86	
3	1977	Atlantic Sturgeon	4-Jul-77	318509	176			23.3	1			1.88	
3	1977	Atlantic Sturgeon	5-Jul-77	318609	164			26.9	1			1.99	
3	1977	Atlantic Sturgeon	6-Jul-77	318709	346			25.5	1			1.94	
3	1977	Atlantic Sturgeon	7-Jul-77	318809	708			24.5	3			5.74	three fish combined; no individual records
3	1977	Atlantic Sturgeon	11-Jul-77	319209	276			24.8	2			3.85	two fish combined; no individual records
3	1977	Atlantic Sturgeon	15-Jul-77	319609	36			26.0	1			1.96	
3	1977	Atlantic Sturgeon	19-Jul-77	320009	152			26.6	1			1.98	
3	1977	Atlantic Sturgeon	21-Jul-77	320209	5			26.1	1			1.96	
3	1977	Atlantic Sturgeon	23-Jul-77	320406	105			26.2	1			1.97	
3	1977	Atlantic Sturgeon	23-Jul-77	320409	219			26.6	3			5.90	three fish combined; no individual records
3	1977	Atlantic Sturgeon	29-Jul-77	321009	135			25.1	1			1.93	
3	1977	Atlantic Sturgeon	14-Aug-77	322609	129			27.3	1			2.00	
3	1977	Atlantic Sturgeon	8-Sep-77	325109	82			25.9	1			1.96	
3	1977	Atlantic Sturgeon	21-Sep-77	326409	253			23.2	1			1.88	
3	1977	Atlantic Sturgeon	25-Sep-77	326809	192			21.0	1			1.82	
3	1977	Atlantic Sturgeon	27-Sep-77	327001	154			21.5	1			1.83	
3	1977	Atlantic Sturgeon	27-Sep-77	327009	13			21.5	1			1.83	
3	Total 1977	Atlantic Sturgeon							153	153	252	252.20	
3	1978	Atlantic Sturgeon	3-Jan-78	300309	55			0.0	1			1.40	
3	1978	Atlantic Sturgeon	4-Jan-78	300409	45			0.0	1			1.40	
3	1978	Atlantic Sturgeon	7-Jan-78	300709	82			1.9	1			1.43	
3	1978	Atlantic Sturgeon	10-Jan-78	301009	410			0.2	2			2.80	two fish combined; no individual records
3	1978	Atlantic Sturgeon	11-Jan-78	301109	610			2.0	1			1.43	
3	1978	Atlantic Sturgeon	13-Jan-78	301309	54			3.2	1			1.45	
3	1978	Atlantic Sturgeon	25-Jan-78	302510	106			1.9	1			1.43	
3	1978	Atlantic Sturgeon	28-Jan-78	302809	161			0.1	2			2.79	two fish combined; no individual records
3	1978	Atlantic Sturgeon	30-Jan-78	303014	100			2.0	1			1.43	
3	1978	Atlantic Sturgeon	31-Jan-78	303109	85			3.8	1			1.46	

Table 2d. Individual Data File Records of Atlantic Sturgeon Collected by Impingement at Indian Point Unit No. 3 in Each Year, 1974 through 1990.

Unit	Year	Taxon	Date	Sample Number	Total Weight (g)	Length (mmtl)	Condition (alive or dead)	H2O Temp (deg C)	Total Count	V-35 DEIS 1999	DSEIS 2008 Table 4-11	Coll. Eff. Adj_Cnt	Comments
3	1978	Atlantic Sturgeon	14-Mar-78	307309	311			3.8	1			1.46	
3	1978	Atlantic Sturgeon	11-Apr-78	310109	227			6.9	2			3.02	two fish combined; no individual records
3	1978	Atlantic Sturgeon	1-May-78	312109	185			9.9	1			1.57	
3	1978	Atlantic Sturgeon	23-May-78	314309	158			15.5	1			1.68	
3	1978	Atlantic Sturgeon	5-Jun-78	315609	27			19.5	1			1.78	
3	1978	Atlantic Sturgeon	16-Sep-78	325909	352			25.0	1			1.93	
3	1978	Atlantic Sturgeon	16-Dec-78	335009	30			7.0	1			1.51	
3	1978	Atlantic Sturgeon	21-Dec-78	335509	16			5.5	1			1.49	
3	Total 1978	Atlantic Sturgeon							21	21	31	31.43	
3	1979	Atlantic Sturgeon	13-Jan-79	301308	145			2.8	1			1.44	
3	1979	Atlantic Sturgeon	21-Jan-79	302108	116			0.2	1			1.40	
3	1979	Atlantic Sturgeon	24-Jan-79	302408	85			0.1	1			1.40	
3	1979	Atlantic Sturgeon	27-Jan-79	302708	90			2.3	1			1.43	
3	1979	Atlantic Sturgeon	8-Feb-79	303908	110			3.0	1			1.44	
3	1979	Atlantic Sturgeon	11-Feb-79	304208	95			3.2	1			1.45	
3	1979	Atlantic Sturgeon	15-Feb-79	304608	89			0.0	1			1.40	
3	1979	Atlantic Sturgeon	21-Feb-79	305208	82			1.0	1			1.41	
3	1979	Atlantic Sturgeon	29-Mar-79	308808	77			6.0	1			1.50	
3	1979	Atlantic Sturgeon	30-Mar-79	308908	145			6.0	1			1.50	
3	1979	Atlantic Sturgeon	31-Mar-79	309008	175			7.1	2			3.03	two fish combined; no individual records
3	1979	Atlantic Sturgeon	12-Apr-79	310207	275			7.0	1			1.51	
3	1979	Atlantic Sturgeon	13-Apr-79	310308	209			6.0	2			2.99	two fish combined; no individual records
3	1979	Atlantic Sturgeon	14-Apr-79	310401	33			7.0	1			1.51	
3	1979	Atlantic Sturgeon	14-Apr-79	310409	140			7.0	1			1.51	
3	1979	Atlantic Sturgeon	21-Apr-79	311109	310			7.0	2			3.03	two fish combined; no individual records
3	1979	Atlantic Sturgeon	23-Apr-79	311308	130			8.1	1			1.53	
3	1979	Atlantic Sturgeon	26-Apr-79	311608	135			9.5	1			1.56	
3	1979	Atlantic Sturgeon	27-Apr-79	311708	420			10.0	2			3.14	two fish combined; no individual records
3	1979	Atlantic Sturgeon	29-Apr-79	311909	175			11.0	1			1.59	
3	1979	Atlantic Sturgeon	30-Apr-79	312007	90			11.0	1			1.59	
3	1979	Atlantic Sturgeon	3-May-79	312307	145			11.9	1			1.61	
3	1979	Atlantic Sturgeon	6-May-79	312608	92			13.2	1			1.63	
3	1979	Atlantic Sturgeon	26-May-79	314607	140			17.6	1			1.73	
3	1979	Atlantic Sturgeon	30-May-79	315007	190			17.1	1			1.72	
3	1979	Atlantic Sturgeon	11-Jun-79	316207	205			21.4	1			1.83	
3	1979	Atlantic Sturgeon	13-Jun-79	316407	180			21.0	1			1.82	
3	1979	Atlantic Sturgeon	19-Jun-79	317008	165			22.1	1			1.85	
3	1979	Atlantic Sturgeon	24-Jun-79	317509	85			23.0	1			1.87	

Table 2d. Individual Data File Records of Atlantic Sturgeon Collected by Impingement at Indian Point Unit No. 3 in Each Year, 1974 through 1990.

Unit	Year	Taxon	Date	Sample Number	Total Weight (g)	Length (mmtl)	Condition (alive or dead)	H2O Temp (deg C)	Total Count	V-35 DEIS 1999	DSEIS 2008 Table 4-11	Coll. Eff. Adj_Cnt	Comments
3	1979	Atlantic Sturgeon	25-Jun-79	317610				22.8	1			1.87	
3	1979	Atlantic Sturgeon	27-Jun-79	317809	60			22.2	1			1.85	
3	1979	Atlantic Sturgeon	8-Jul-79	318909	153			22.0	1			1.84	
3	1979	Atlantic Sturgeon	6-Aug-79	321808	435			28.9	1			2.05	
3	1979	Atlantic Sturgeon	10-Sep-79	325308	285			25.5	1			1.94	
3	Total 1979	Atlantic Sturgeon							38	38	61	60.97	
3	1980	Atlantic Sturgeon	12-Feb-80	304309	70			0.3	1			1.40	
3	1980	Atlantic Sturgeon	22-Feb-80	305309				1.1	1			1.41	
3	1980	Atlantic Sturgeon	23-Feb-80	305409	150			1.1	1			1.41	
3	1980	Atlantic Sturgeon	24-Feb-80	305509	235			1.8	1			1.42	
3	1980	Atlantic Sturgeon	7-Mar-80	306708	900			2.8	1			1.44	
3	1980	Atlantic Sturgeon	4-Jun-80	315609	150			21.5	1			1.83	
3	1980	Atlantic Sturgeon	6-Jun-80	315809	105			21.5	1			1.83	
3	1980	Atlantic Sturgeon	7-Jun-80	315909	100			21.5	1			1.83	
3	1980	Atlantic Sturgeon	12-Jul-80	319409	204			27.0	1			1.99	
3	1980	Atlantic Sturgeon	23-Aug-80	323611	240			27.8	1			2.01	
3	Total 1980	Atlantic Sturgeon							10	10	17	16.58	
3	1981	Atlantic Sturgeon	14-Jan-81	301400	93			4.2	1			1.46	
3	1981	Atlantic Sturgeon	15-Jan-81	301504	91			4.2	1			1.46	
3	1981	Atlantic Sturgeon	20-Jan-81	302012	108			4.1	1			1.46	
3	1981	Atlantic Sturgeon	3-Dec-81	333708	110			8.2	1			1.54	
3	1981	Atlantic Sturgeon	5-Dec-81	333909	741			8.2	1			1.54	
3	Total 1981	Atlantic Sturgeon							5	5	73	7.46	
3	1982	Atlantic Sturgeon	17-Feb-82	304813	155			1.2	1			1.41	
3	Total 1982	Atlantic Sturgeon							1	1	127	1.41	
3	Total 1983	Atlantic Sturgeon							0	0	NR		
3	1984	Atlantic Sturgeon	26-Jul-84	320809	51			26.3	1			1.97	
3	1984	Atlantic Sturgeon	5-Aug-84	321809	225			27.6	1			2.01	
3	1984	Atlantic Sturgeon	16-Aug-84	322909	220			26.5	1			1.97	
3	1984	Atlantic Sturgeon	24-Aug-84	323709	115			26.0	1			1.96	
3	1984	Atlantic Sturgeon	21-Sep-84	326508	412			22.0	1			1.84	
3	Total 1984	Atlantic Sturgeon							5	5	179	9.75	
3	1985	Atlantic Sturgeon	1-Feb-85	3004	85	280	A	0.0	1			1.40	
3	1985	Atlantic Sturgeon	3-Feb-85	3005	320	398	A	0.0	1			1.40	
3	1985	Atlantic Sturgeon	3-Feb-85	3005	55	240	A	0.0	1			1.40	
3	1985	Atlantic Sturgeon	3-Apr-85	3036	90	na	na	9.5	1			1.56	
3	1985	Atlantic Sturgeon	28-Apr-85	3040	41	240	A	14.0	1			1.65	
3	1985	Atlantic Sturgeon	2-Feb-85	NS	55	140	A	2.0	1			1.43	

Table 2d. Individual Data File Records of Atlantic Sturgeon Collected by Impingement at Indian Point Unit No. 3 in Each Year, 1974 through 1990.

Unit	Year	Taxon	Date	Sample Number	Total Weight (g)	Length (mmtl)	Condition (alive or dead)	H2O Temp (deg C)	Total Count	V-35 DEIS 1999	DSEIS 2008 Table 4-11	Coll. Eff. Adj_Cnt	Comments
3	1985	Atlantic Sturgeon	4-Feb-85	NS	315	402	A	2.4	1			1.43	
3	1985	Atlantic Sturgeon	4-Feb-85	NS	54	238	A	2.4	1			1.43	
3	1985	Atlantic Sturgeon	5-Feb-85	NS	50	235	D	2.4	1			1.43	
3	1985	Atlantic Sturgeon	6-Feb-85	NS	310	401	D	2.4	1			1.43	
3	1985	Atlantic Sturgeon	8-Mar-85	NS	135	344	D	5.7	1			1.49	
3	1985	Atlantic Sturgeon	8-Mar-85	NS	145	344	D	5.6	1			1.49	
3	1985	Atlantic Sturgeon	11-Mar-85	NS	345	410	A	4.9	1			1.48	
3	1985	Atlantic Sturgeon	12-Mar-85	NS	330	412	D	4.9	1			1.48	
3	1985	Atlantic Sturgeon	12-Mar-85	NS	180	363	D	4.9	1			1.48	
3	1985	Atlantic Sturgeon	18-Mar-85	NS	146	343	D	7.1	1			1.51	
3	1985	Atlantic Sturgeon	18-Mar-85	NS	200	380	D	7.1	1			1.51	
3	Total 1985	Atlantic Sturgeon							17	5(12)	300	25.00	
3	1986	Atlantic Sturgeon	14-Feb-86	304510	775	775	D	-0.5	1			1.39	
3	1986	Atlantic Sturgeon	28-Feb-86	NS	274	274	A	2.2	1			1.43	
3	1986	Atlantic Sturgeon	13-Mar-86	NS	1795	788	D	3.8	1			1.46	
3	1986	Atlantic Sturgeon	30-Nov-86	NS	409	445	D	6.9	1			1.51	
na	1986	Atlantic Sturgeon	21-Apr-86	na	454	455	D	10.3	1			1.58	Not included in DSEIS table. Source of data is Table 4-9 of Annual Report
3	Total 1986	Atlantic Sturgeon							5	1(3)	126	5.79	
3	1987	Atlantic Sturgeon	27-Sep-87	327008	94	na	D	20.0	1			1.79	
3	Total 1987	Atlantic Sturgeon							1	1	88	1.79	
3	Total 1988	Atlantic Sturgeon							0	0	NR		
3	Total 1989	Atlantic Sturgeon							0	0	NR		
3	1990	Atlantic Sturgeon	26-Feb-90	3021	83	271	D	5.5	1			1.49	
3	1990	Atlantic Sturgeon	27-Apr-90	NS	750	575	D	10.9	1			1.59	
3	Total 1990	Atlantic Sturgeon							2	0(2)	NR	3.07	
3	1975-1990	Atlantic Sturgeon							266	260(17)	1268	429.55	

NS Collected on a non-scheduled sampling date

NR Not reported

na Not available

1.7 Water temperature estimated from weekly average

Blank space = no data in the SAS Impingement Data Files

(1) Numbers in parentheses indicate number of shortnose sturgeon taken on non-sample days.

**Table 3a. Estimates of the Annual Total Number of Shortnose Sturgeon
Collected by Impingement at Indian Point Unit 2, 1974 through 1990.**

<u>Shortnose Sturgeon Unit 2</u>				
Year	Level 5 Count	Table V-36 DEIS 1999	CE Adjusted Level 5 Count	Table 4-11 DSEIS 2008
1974	3	3	9	NR
1975	1	1	3	3
1976	1	2	2	2
1977	5	6	11	11
1978	2	2	5	5
1979	2	2	4	4
1980	0	0	0	NR
1981	0	0	0	NR
1982	0	0	0	NR
1983	0	0	0	NR
1984	1	1	3	176
1985	0	0	0	NR
1986	0	0	0	NR
1987	2	2	4	116
1988	3	3	7	NR
1989	0	0	0	NR
1990	1	1	3	NR
Total	21	23	51	317

NR Not Reported

Table 3b. Estimates of the Annual Total Number of Shortnose Sturgeon Collected by Impingement at Indian Point Unit 3, 1974 through 1990.

Shortnose Sturgeon Unit 3				
Year	Level 5 Count	Table V-36 DEIS 1999	CE Adjusted Level 5 Count	Table 4-11 DSEIS 2008
1974	0	NR	0	NR
1975	NR	NR	NR	NR
1976	0	0	0	NR
1977	1	1	2	2
1978	3	3	5	5
1979	2	2	3	3
1980	1	1	2	2
1981	0	0	0	NR
1982	0	0	0	NR
1983	0	0	0	NR
1984	1	1	2	154
1985	0	0	0	NR
1986	0	0	0	NR
1987	1	1	2	55
1988	1	1	2	186
1989	1	1	2	NR
1990	0	0	0	NR
Total	11	11	18	407

NR Not Reported

Table 3c. Estimates of the Annual Total Number of Atlantic Sturgeon Collected by Impingement at Indian Point Unit 2, 1974 through 1990.

<u>Atlantic Sturgeon - Unit 2</u>				
Year	Level 5 Count	Table V-35 DEIS 1999	CE Adjusted Level 5 Count	Table 4-11 DSEIS 2008
1974	101	100	282	NR
1975	118	118	302	302
1976	8	8	17	17
1977	44	44	105	105
1978	16	16	38	38
1979	32	32	75	75
1980	9	9	24	24
1981	3	3	8	221
1982	1	1	2	217
1983	3	3	6	149
1984	3	3	6	363
1985	9	8	19	460
1986	2	2	6	696
1987	2	2	6	NR
1988	1	1	2	NR
1989	0	0	0	NR
1990	0	0	0	NR
Total	352	350	897	2667

NR Not Reported

Table 3d. Estimates of the Annual Total Number of Atlantic Sturgeon Collected by Impingement at Indian Point Unit 3, 1974 through 1990.

<u>Atlantic sturgeon - Unit 3</u>				
Table V-35 CE Adjusted Table 4-11				
Year	Level 5 Count	DEIS 1999	Level 5 Count	DSEIS 2008
1974	10	12	17	NR
1975	NR	NR	NR	NR
1976	8	8	14	14
1977	153	153	252	254
1978	21	21	31	36
1979	38	38	61	64
1980	10	10	17	18
1981	5	5	7	73
1982	1	1	1	127
1983	0	0	0	NR
1984	5	5	10	333
1985	17	17	25	300
1986	4	4	6	126
1987	1	1	2	143
1988	0	0	0	186
1989	0	0	0	NR
1990	2	2	3	NR
Total	275	277	447	1674

NR Not Reported

Table 4. Impingement Data File Level 5 Actual Counts and Level 5 Counts Adjusted for Collection Efficiency for Shortnose and Atlantic Sturgeon Collected in Impingement Samples, Indian Point, 1975 through 1990

Study Year	IP2						IP3						IP2 & IP3		
	Shortnose Sturgeon		Atlantic Sturgeon		Total IP2		Shortnose Sturgeon		Atlantic Sturgeon		Total IP3				
	Level 5 Count Adjusted for Collection		Level 5 Count Adjusted for Collection		Level 5 Count Adjusted for Collection		Level 5 Count Adjusted for Collection		Level 5 Count Adjusted for Collection		Level 5 Count Adjusted for Collection		Grand Total Level 5 Collection		
	Level 5 Count	Efficiency ^a	Level 5 Count	Efficiency	Level 5 Count	Efficiency	Level 5 Count	Efficiency	Level 5 Count	Efficiency	Level 5 Count	Efficiency	Level 5 Count	Adjusted Count	
1975	1	3.14	118	301.81	119	304.95	NR	NR	NR	NR	NR	NR	119	304.95	
1976	1	2.01	8	16.64	9	18.65	0	0.00		8	14.09	8	14.09	17	32.74
1977	5	11.06	44	104.85	49	115.91	1	1.87	153	252.20	154	254.07	203	369.98	
1978	2	4.53	16	38.28	18	42.81	3	4.62	21	31.43	24	36.05	42	78.86	
1979	2	4.31	32	74.75	34	79.06	2	3.14	38	60.97	40	64.11	74	143.17	
1980	0	0.00	9	23.72	9	23.72	1	1.64	10	16.58	11	18.22	20	41.94	
1981	0	0.00	3	8.01	3	8.01	0	0.00	5	7.46	5	7.46	8	15.47	
1982	0	0.00	1	2.39	1	2.39	0	0.00	1	1.41	1	1.41	2	3.80	
1983	0	0.00	3	6.11	3	6.11	0	0.00	0	0.00	0	0.00	3	6.11	
1984	1	2.75	3	6.43	4	9.18	1	1.69	5	9.75	6	11.44	10	20.62	
1985	0	0.00	9	19.23	9	19.23	0	0.00	17	25.00	17	25.00	26	44.23	
1986	0	0.00	2	5.54	2	5.54	0	0.00	5	5.79	5	5.79	7	11.33	
1987	2	4.11	2	6.01	4	10.12	1	1.63	1	1.79	2	3.42	6	13.54	
1988	3	7.02	1	2.11	4	9.13	1	2.02	0	0.00	1	2.02	5	11.15	
1989	0	0.00	0	0	0	0.00	1	1.82	0	0.00	1	1.82	1	1.82	
1990	1	3.37	0	0	1	3.37	0	0.00	2	3.07	2	3.07	3	6.44	
Grand Total	18	42.30	251	615.88	269	658.18	11	18.43	266	429.54	277	447.97	546	1,106.15	

NR - Not reported

^a Unit specific collection efficiency coefficients calculated according to the equations presented in the 1990 Indian Point Annual Report and applied to the Level 5 raw count.